BadgerCare Evaluation

Department of Health and Family Services
Office of Strategic Finance
Evaluation Section

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July 2004

Executive Summary

BadgerCare is Wisconsin's health insurance program for low-income, uninsured families with children under 19 years of age who are not eligible for Medicaid, and who do not have access to employer sponsored health insurance (ESI). BadgerCare was established by 1997 Wisconsin Act 27, with authority provided by s.49.665 of the Wisconsin Statutes. BadgerCare is funded through the 1997 federal State Children's Health Insurance Program (SCHIP), Title XXI of the Social Security Act. The program was implemented April 1, 1999 for teens ages 15-18 in families below 100 percent FPL, while enrollment of all remaining eligible parents and children began July 1, 1999. Services for adults were reimbursed at the Medicaid rate of 59 percent, while children were covered at the SCHIP reimbursement rate of 71 percent. In January 2001, the CMS approved Wisconsin's amendment to its section 1115 demonstration waiver which allowed most BadgerCare parents to be reimbursed at the SCHIP reimbursement rate of 71 percent. The CMS recently approved an extension of BadgerCare from April 1, 2004 through March 31, 2007.

BadgerCare had an efficient and rapid start-up because it was created as an expansion of Wisconsin's Medicaid Plan, which allowed it to use pre-existing eligibility, provider and reimbursement systems. Outreach and enrollment were priorities for BadgerCare. An additional 99,958 uninsured people were insured in the two years after BadgerCare started, including 74,857 in BadgerCare (22,786 children and 52,071 adults), 22,060 in Healthy Start (20,626 children and 1,434 pregnant mothers), and 3,041 in AFDC Medicaid (an estimated 2,068 children and 973 adults).

BadgerCare start-up is associated with a decrease in the proportion of uninsured in Wisconsin from 10.2 percent to 7.7 percent, a decrease in the percentage of uninsured low income Wisconsin residents from 39 percent to 19 percent, and a decrease in the percentage of low income uninsured children from 13 percent to 8.7 percent.

Research indicates that SCHIP programs which enroll adult parents and their children generally insure higher rates of eligible children than do programs which insure only children. In Wisconsin, members of a family applying for BadgerCare are screened first for Medicaid and Healthy Start, and are enrolled in these programs if eligible, before being screened for BadgerCare. As a result, many families are enrolled in one or more programs; for example, younger children may be in Medicaid or Healthy Start, while older children and parents may be enrolled in BadgerCare.

BadgerCare serves proportionally more adults, more Caucasians and fewer minorities than AFDC Medicaid and Healthy Start. BadgerCare serves more females than males, as do Medicaid and Healthy Start. BadgerCare enrollees are more likely to live in rural counties than family Medicaid participants. These tendencies also were found when BadgerCare enrollees were compared to Wisconsin's population as a whole, except that BadgerCare served proportionally fewer Caucasians and more minorities than the statewide incidence. There was no noticeable change in the demographic characteristics of the BadgerCare caseload from 2001 to 2002.

In comparison to AFDC Medicaid and Healthy Start, BadgerCare enrollees were more likely to receive preventive dental care, well-child care, HealthCheck exams and mammograms, but less likely to receive Pap tests and to use an emergency room for health care. BadgerCare enrollees' use of other services was similar to rates observed for family Medicaid clients. With respect to the overall Wisconsin population, BadgerCare clients generally had lower medical service utilization; they were less likely to receive dental care, ambulatory outpatient care, Pap tests and mammograms. Emergency room use rates were similar. BadgerCare children were more likely to receive lead toxicity screening than children in the general population.

The Consumer Assessment of Health Plans (CAHPS) survey results show that BadgerCare recipients were satisfied with their health care insurance plan, with services received, with their physicians, and with waiting times for appointments. The majority of BadgerCare premium payers were not adversely affected by the 3 percent premium, although 6 percent did report the premium to be a "big problem." Most reported that they had been relatively stable in their overall health since joining BadgerCare. BadgerCare and Medicaid enrollees were found to be equally satisfied with their insurance and services.

Wisconsin uses several strategies to deter substitution of coverage including application questions, waiting periods, a premium assistance program, and verification of insurance status through an employer survey and through a match of MMIS enrollment data with a private coverage database. The process for surveying employers is being improved in 2004.

Medical Expenditure Panel Survey (MEPS) data for 1999-2001 indicates a slight decline in the incidence of all private-sector employees in Wisconsin working in establishments that offer employer-sponsored insurance (91to 89 percent), and a considerable decline (72.9 to 65.4 percent) in firms with 50 or fewer employees. There has been essentially no change in the statewide incidence of employees working in Wisconsin establishments that offer employer-sponsored insurance who are eligible for employee-sponsored insurance, but there was a significant decline in the percent of employees in low wage firms that offer employer-sponsored insurance who are eligible for employer-sponsored insurance (59 to 46 percent).

With regard to cost of employer-sponsored insurance, there has been essentially no change in the percent of Wisconsin private-sector establishments offering health insurance that require no employee contribution for family coverage or in the incidence of all private-sector employees in Wisconsin working in establishments offering family coverage that required no employee contribution. However, there have been significant increases in the cost of premiums for family coverage in Wisconsin, especially in firms with 50 or fewer employees, and a possible large increase in the employee share in private-sector workplaces with 50 percent or more low-wage employees between 2000 and 2001 (23.5 to 30.4 percent).

However it is likely that factors other than BadgerCare are responsible for these changes. The implication for BadgerCare is that there will be increased demand for coverage.

BadgerCare's effect on Medicaid HMO capacity in Wisconsin is mixed. The number of people in managed care has nearly doubled from 182,669 enrollees in June 1999 to 355,177 in April 2004, including 78,662 in BadgerCare. The addition of 172,508 new enrollees in less than five

years demonstrates that Wisconsin's managed care system was robust enough to absorb a large number of new enrollees after BadgerCare started. However, the overall percentage of persons in managed care declined by about 10 percent soon after BadgerCare started, from about 85 percent in June 1999 to about 76-74 percent from January 2001 through April 2004. The percent decline appears to have been initially due to the withdrawal of some HMOs from the managed care network shortly after BadgerCare was introduced, but has probably been sustained in the interim by the rural location of many BadgerCare recipients and the large influx of new AFDC Medicaid and BadgerCare enrollees after 2002.

Table of Contents

List of Tables

List of Figures

Introduction

Origins and Background of BadgerCare[1]

BadgerCare is Wisconsin's health insurance program for low-income, uninsured families who are not eligible for Medicaid, and who do not have access to employer sponsored health insurance (ESI). BadgerCare is a result of state and federal welfare reform, and is based on the idea that health insurance is essential for families moving from welfare to work, and for low-income working families with children. BadgerCare was established by 1997 Wisconsin Act 27, with authority provided by s.49.665 of the Wisconsin Statutes. BadgerCare is funded through the 1997 federal State Children's Health Insurance Program (SCHIP), Title XXI of the Social Security Act.

Wisconsin's welfare reform initiatives began in 1987 and culminated in the Wisconsin Works (W-2) program of 1995. Shortly thereafter, the United States Congress replaced Aid to Families with Dependent Children (AFDC) with Temporary Assistance for Needy Families (TANF) by approving the Personal Responsibility and Work Opportunity Act of 1996. This legislation changed welfare from a cash-aid entitlement program to a temporary cash-aid, work-assistance program. It also ended the automatic eligibility link between AFDC and Medicaid.

Wisconsin implemented its TANF program, also known as Wisconsin Works (W-2) in October 1996. The state also requested a Medicaid waiver from the federal Health Care Financing Administration (HCFA, now the Centers for Medicare and Medicaid Services or CMS) to provide health insurance for W-2 participants. This proposed health plan waiver was judged unacceptable by HCFA, and was denied in November, 1996.

In August 1997, while Wisconsin continued to develop an acceptable W-2 health plan, the US Congress approved the Balanced Budget Act of 1997. This Act included funding for the State Children's Health Insurance Program (SCHIP), Title XXI of the Social Security Act. The goal of SCHIP is to provide, expand and maintain health insurance coverage for low-income children who would otherwise be uninsured. The federal reimbursement rate for children in state SCHIP programs was set at 71 percent, an enhancement of the Medicaid reimbursement rate of 59 percent.

Despite the fact that many families leaving AFDC for TANF programs were eligible for transitional health insurance, the number of uninsured families and children grew rapidly throughout the nation during this period. The main problem was outreach; families were either unaware of, or did not know they were eligible for, public health insurance after welfare and Medicaid were disconnected.

Wisconsin health care planners made outreach a priority when they designed BadgerCare. One key idea was that awareness and knowledge of BadgerCare would be greater if adult family

[1] This section is based on "The Origins and Implementation of BadgerCare: Wisconsin's Experience with the State Children's Health Insurance Program (SCHIP)," by Coimbra Sirica, January 2001, DHCF planning documents and on DHFS correspondence with CMS regarding BadgerCare.

members were covered in addition to children because parents would be more likely to notice and learn about family insurance, compared to a program dealing only with children. Outreach to parents for family insurance, it was hypothesized, would eventually result in more children being covered than would be the case if children alone were targeted.

Wisconsin's Title XXI State Plan to expand Medicaid coverage using SCHIP funding was approved by HCFA May 29, 1998. This program covered children age 15 through 18 in families with incomes below 100 percent FPL. At the same time, the DHFS sought to provide family coverage for remaining low-income children not eligible for Medicaid, and their parents, by amending the State Plan. Wisconsin planners wanted to use Title XXI enhanced funding to insure children, but also wished to include parents and provide family coverage.

Wisconsin's Title XXI waiver request to cover adult family members was denied in August 1998. Congress intended Title XXI specifically for insuring children, and HCFA believed that a negative precedent for other states would be set if Wisconsin were allowed to include adults.

Further negotiations with HCFA did allow Wisconsin to make BadgerCare a family health insurance program, albeit with a Medicaid reimbursement rate for adults. In January 1999, HCFA approved amendments to Wisconsin's Title XXI Plan and to its section 1115 demonstration authority for a Title XIX expansion, that allowed coverage of non-Medicaid children and their parents, respectively, in families with incomes up to 185 percent of the Federal Poverty Level (FPL). Once enrolled, families remained eligible up to an income of 200 percent FPL. Health services for most adults were reimbursed at the Medicaid rate of 59 percent, while children were covered at the SCHIP reimbursement rate of 71 percent.

The approval process also included an "enrollment trigger" that allowed the Wisconsin Legislature to lower income limits for new applicants if the state exceeded its budgeted projections for adult enrollment in the program. This feature capped the Medicaid entitlement for BadgerCare adults and limited the state's fiscal responsibility.

BadgerCare for teens ages 15-18 in families below 100 percent FPL was implemented April 1, 1999, while BadgerCare for all remaining eligible families began July 1, 1999.

In March 2000, Wisconsin submitted an amendment to their section 1115 demonstration to the Centers for Medicare and Medicaid Services (CMS, formerly HCFA). This amendment requested enhanced Title XXI funding for BadgerCare parents with incomes between 100 percent and 185 percent of FPL who were covered under the Title XIX demonstration. CMS approved this change January 18, 2001, and since then, health services for BadgerCare parents within the specified income range have been reimbursed at the Title XXI reimbursement rate of 71 percent. Parents with incomes below 100 percent FPL remain covered by Medicaid at 59 percent. This waiver would end if Wisconsin uses the "enrollment trigger" described above, and federal reimbursement for adults above 100 percent FPL would revert to the 59 percent level.

BadgerCare also includes a premium assistance program that aids some families who work for employers offering health insurance. The Health Insurance Premium Purchase (HIPP) program can partially pay for employer-sponsored insurance (ESI) when the employer pays at least 40

percent, but less than 80 percent, of the family premium. (A 2001-2002 amendment to Wisconsin's Title XXI Plan changed the lower boundary from 60 percent to 40 percent.) In addition, HIPP requires that participants receive wraparound services if the employer's health plan is not as comprehensive as BadgerCare, and that the resulting premium and service package be cost effective compared to BadgerCare HMO family coverage. As of April 30, 2004, 210 families had participated in HIPP, with 105 families active on that date.

BadgerCare family enrollment began in July 1999 with 8,647 persons, and expanded very rapidly. By January 2000, 53,622 people were enrolled, and a year after the program started, in July 2000, 84,712 low-income family members were insured by BadgerCare. The program has continued to grow since then; 109,940 persons were enrolled in July 2003, and 114,711 were enrolled in January 2004. The reasons for BadgerCare's rapid growth, and its impact on Medicaid enrollment and Wisconsin's uninsured will be discussed later in this report.

Wisconsin submitted a BadgerCare waiver renewal request in December 2003. CMS approved this request in March 2004, allowing an extension of the program from April 1, 2004 through March 31, 2007. Wisconsin will continue to receive the enhanced federal matching rate of 71 percent for BadgerCare adults with incomes above 100 percent FPL, as well as for BadgerCare children, for the duration of the waiver renewal.

BadgerCare Timeline of Major Events

August 1997	January 1999	July 1999	January 2001	March 2004
Title XXI, SCHIP, created as part of the federal Balanced Budget Act of 1997.	Wisconsin's Title XXI SCHIP plan covering children is approved; its section 1115 demonstration authority for a Title XIX expansion covering parents in BadgerCare is approved.	BadgerCare family enrollment begins.	Wisconsin's section 1115 demonstration authority for a Title XXI waiver allowing 71 percent reimbursement for BC parents with income above 100 percent FPL is approved.	Wisconsin receives final approval from CMS for a three year extension of the BadgerCare waiver from April 1, 2004 through March 31, 2007.

Description of BadgerCare Provisions

BadgerCare is Wisconsin's health insurance program for low-income, uninsured families. In order to be eligible for BadgerCare, families:

- Must have children under 19 years of age living at home.

- Must be uninsured.

- Must not be eligible for full-benefit Medicaid, including Medicaid Healthy Start. Families are first screened for these programs, and, if eligible, are enrolled in AFDC Medicaid or Healthy Start. Family members ineligible for AFDC Medicaid or Healthy Start are then screened for BadgerCare, and enrolled if eligible. Many BadgerCare families are covered through a mix of AFDC Medicaid, Healthy Start and BadgerCare. Younger children are often covered by AFDC Medicaid or Healthy Start, while older children and parents may be covered by BadgerCare.

- Must have an income at or below 185 percent of FPL. Once enrolled, family income can increase to 200 percent of FPL before the family becomes ineligible.

- Are not subject to an asset test.

BadgerCare families:

- Receive the same benefit package available under the Wisconsin Medicaid program. Participants must receive services from Medicaid-certified providers and all Medicaid HMOs in Wisconsin are required to serve eligible BadgerCare applicants. About 70 percent of BadgerCare enrollees are currently in HMOs.

Some BadgerCare eligibility requirements were designed to prevent a substitution of publicly-funded insurance for private or employer sponsored insurance (ESI). This substitution is commonly referred to as "crowd-out." Crowd-out occurs when:

- Families drop employer-sponsored coverage because BadgerCare is available.

- Families remain in BadgerCare despite access to employer-sponsored coverage.

- Employers reduce or drop their family coverage because of response to BadgerCare eligibility policies.

The eligibility requirements designed to prevent crowd-out from occurring are built into the BadgerCare application and enrollment process to automatically screen out ineligible applicants. Applicants are <u>ineligible</u> for BadgerCare if:

- They are currently insured or if they have been covered by employer-sponsored insurance within the three months preceding their application to BadgerCare. (Exceptions are made due to involuntary loss of employment or change to a job not offering health care benefits or other involuntary events that reduce coverage.)

- They currently have access to, or have had access within the preceding 18 months to, an employer plan that pays at least 80 percent of the premium.

- They are self-employed with a purchased health plan, or they are self-employed, incorporated, and an employee of the corporation receiving health insurance through the corporation.

BadgerCare applicants who had access, in the 18 months prior to BadgerCare application, to an ESI plan in which the employer paid between 40% and 80% of monthly premium may be eligible for the Health Insurance Premium Purchase (HIPP) program, described previously. HIPP allows the use of BadgerCare funds to pay a part of the premium to enroll families in an employer-sponsored health insurance plan. A change in Wisconsin's 2003-2005 Biennial Budget allows BadgerCare and Medicaid Purchase Plan (MAPP) applicants who are eligible for HIPP to enroll when they are found eligible, rather than waiting for the employer's open enrollment period. As of April 30, 2004, 210 families had participated in HIPP, with 105 families active on that date.

BadgerCare also required participants with an income equal to or greater than 150 percent of FPL to pay a monthly premium equal to 3 percent of their income. This provision was meant to ensure that recipients have a stake in the program, to provide assurance to the public and the Legislature that BadgerCare is not simply a "welfare" program, and to increase the acceptability of the program to potential applicants unwilling to "accept charity." Approximately 17 percent of BadgerCare families were paying a premium at the end of 2003. The premium provision will be further discussed in the satisfaction section of this report.

The Wisconsin Biennial Budget for 2003-2005 made two changes in BadgerCare that will be operational in 2004:

- The BadgerCare premium for families with incomes at or above 150 percent of FPL changed from 3 percent to 5 percent on January 1, 2004. Only families with income at or above 150 percent of the FPL are required to pay a premium under BadgerCare.

- Applicants for BadgerCare who are employed will be asked to provide verification from their employers of their income, whether employer sponsored health care insurance is offered, and the amount paid by the employer toward insurance. This verification will be required as a condition of eligibility. The new method of collecting this information is expected to improve the previous system in which the DHCF mailed a form to employers seeking this verification.

DHFS BadgerCare Evaluation

The Wisconsin DHFS agreed to evaluate selected aspects of BadgerCare. Examples of possible evaluation objectives were listed in Wisconsin's application for a Medicaid Section 1115 Demonstration, BadgerCare. The Evaluation Section in the DHFS' Office of Strategic Finance was designated to do this evaluation. Staff in the Division of Health Care Financing and the OSF Evaluation Section selected fourteen objectives, in four broad areas, that were to be addressed by the evaluation. The planned evaluation objectives were submitted to the CMS in the Demonstration Quarterly Report for July-September 2002. The objectives of this evaluation are:

BadgerCare's Impact on the Uninsured

- *Objective One: Describe BadgerCare outreach and enrollment policies and procedures, assess whether these efforts resulted in eligible children and adults being enrolled in Medicaid, and estimate the number of children and adults enrolled in Medicaid due to BadgerCare*

- *Objective Two: Determine if BadgerCare increased the number and rate of Wisconsin residents who were covered by health insurance, particularly children*

- *Objective Three: Assess whether or not enrolling entire families in BadgerCare increased the number and rate of insured children compared to SCHIP programs in which only children were enrolled.*

BadgerCare Participants and Services Used

- *Objective Four: Compare and contrast BadgerCare participants, Medicaid recipients, and the Wisconsin population as a whole using demographic indicators such as age, sex, income, race-ethnicity, etc.*

- *Objective Five: Compare and contrast BadgerCare participants, Medicaid recipients, and the Wisconsin population as a whole using selected measures of medical service utilization, for example, well baby exams, mammograms, treatment in a primary care clinic, etc.*

Satisfaction of BadgerCare Enrollees

- *Objective Six: Determine if the price of coverage (BadgerCare premium) presents a hardship for participants, and if premiums were a factor in their decision to enroll*

- *Objective Seven: Determine if BadgerCare participants are satisfied with the array of health care services available to them under their coverage*

- *Objective Eight: Determine if BadgerCare participants are satisfied or dissatisfied with waiting time for medical appointments*

- *Objective Nine: Determine if BadgerCare participants are satisfied or dissatisfied with their ability to secure referrals to medical specialists*

- *Objective Ten: Determine if BadgerCare participants believe their health has improved, stayed the same, or gotten worse since enrolling in BadgerCare*

- *Objective Eleven: Determine if BadgerCare participants are satisfied with the quality of care received*

BadgerCare and Substitution of Coverage

- *Objective Twelve: Describe BadgerCare program provisions designed to prevent enrollees from dropping other insurance coverage in order to participate in BadgerCare, and assess whether or not BadgerCare enrollees dropped other insurance coverage in order to participate in BadgerCare*

- *Objective Thirteen: Determine if Wisconsin employers are currently changing their health care benefit packages, the nature of any changes (increasing, decreasing, dropping), the reasons for any changes, and the possible impact on BadgerCare*

BadgerCare and HMO Capacity

- *Objective Fourteen: Determine whether or not BadgerCare resulted in an increase in HMO capacity in Wisconsin*

Other Evaluations and Reports on BadgerCare

A number of reports and evaluations of BadgerCare have been completed, and the results have been cited and footnoted in this report when applicable. Some of the reports and evaluations that have been used in the preparation of this report are:

The DHCF in the DHFS has prepared Demonstration Quarterly Reports to the CMS which summarize BadgerCare program statistics and operations, including applications and enrollment, complaints/grievances, quality assurance procedures, fiscal issues, and access/service delivery issues, among other topics.

The DHCF in the DHFS has prepared Annual Federal Fiscal Year Reports of Wisconsin's Title XXI SCHIP program, BadgerCare, for the CMS. These reports summarize progress and statistics on specified issues such as outreach activities, service utilization, program costs, the substitution of publicly funded health insurance for employer sponsored insurance (crowd-out), and others.

2002 Medicaid BadgerCare and Managed Care Recipient Satisfaction Survey Results, December 2003, prepared by APS Healthcare for the DHCF in the DHFS was used as background for this report, and data from the survey were analyzed to address objectives about the satisfaction of BadgerCare participants.

Vol. 2. 2002 HMO Performance Data, Medicaid Program Data and BadgerCare Program Data Compared February 2004 prepared by the Bureau of Managed Health Care Programs in DHCF. This report was used to supplement the comparison of health care services between Medicaid and BadgerCare participants.

The Milbank Memorial Fund funded "The Origins and Implementation of BadgerCare: Wisconsin's Experience with the State Children's Health Program (SCHIP)," written by Coimbra Sirica, and issued January 2001.

Covering Kids Wisconsin prepared "The BadgerCare Stakeholder Survey Phone Survey 2000," funded by The Robert Wood Johnson Foundation. It provides a variety of perspectives on BadgerCare.

The CMS contracted with Research Triangle Institute (RTI) to evaluate BadgerCare. RTI issued its first report "Evaluation of the BadgerCare Medicaid Demonstration: The Case Study Report" in July 2002. The second report was issued in draft in October 2003, and a final report "Evaluation of the BadgerCare Medicaid Demonstration" was issued in December 2003. Results of these evaluations are cited in this report when applicable. Based in part upon the favorable results of the RTI evaluation, CMS approved an extension of Wisconsin's BadgerCare waiver from April 1, 2004 through March 31, 2007.

Methodology

BadgerCare's Impact on the Uninsured

Objective One: Describe BadgerCare outreach and enrollment policies and procedures, assess whether these efforts resulted in eligible children and adults being enrolled in Medicaid, and estimate the number of children and adults enrolled in Medicaid due to BadgerCare

Descriptions of BadgerCare outreach and enrollment policies and procedures are based on DHFS' annual SCHIP reports to CMS, which described these activities as they occurred. Other descriptive material is based on the reports "The Origins and Implementation of BadgerCare: Wisconsin's Experience with the State Children's Health Program (SCHIP)," by Coimbra Sirica, January 2001 and "The BadgerCare Stakeholder Survey Phone Survey 2000" by Covering Kids Wisconsin, funded by The Robert Wood Johnson Foundation.

Because all applicants complete the same eligibility process, and are checked for AFDC Medicaid and Healthy Start before being screened for BadgerCare, it is impossible to count the exact number of persons who came to apply for BadgerCare, but were screened into AFDC Medicaid and Healthy Start instead. However, changes in enrollment rates and patterns immediately after BadgerCare start-up may indicate any impact of the new program, particularly if there is a marked difference from the period before start-up. Examined in this context were enrollment data for AFDC Medicaid and Healthy Start for the year before BadgerCare, and for the two years after the start-up date, or April 1999 through March 2001. Additionally, enrollment data for the three years since then (April 2001-March 2004) were analyzed.

These enrollment data were also used to estimate the number of children and adults enrolled in family Medicaid (Healthy Start and AFDC Medicaid) after BadgerCare was introduced.

Objective Two: Determine if BadgerCare increased the number and rate of Wisconsin residents who were covered by health insurance, particularly children

Program enrollment data were analyzed to estimate the number of previously uninsured people, children and adults, who were covered by health insurance after BadgerCare. The rate of

Wisconsin's health insurance coverage for low income families, before and after the BadgerCare program, was examined based on insurance trends from 1998 through 2002 using Wisconsin's annual Family Health Survey.[2] United States Census population survey data were used to determine the overall trends in Wisconsin's uninsured from 1998 through 2002.[3] As a second measure focusing on low income children, United States Census data for Wisconsin from 1993-2002 were also examined.[4]

Objective Three: Assess whether or not enrolling entire families in BadgerCare increased the number and rate of insured children compared to SCHIP programs in which only children were enrolled

This objective was addressed through a discussion of research assessing program enrollment by comparing "children only" SCHIP programs with "family" SCHIP programs which included both children and their parents.

BadgerCare Participant Demographics and Services Used

Objective Four: Compare and contrast BadgerCare participants, Medicaid recipients, and the Wisconsin population as a whole using demographic indicators such as age, sex, income, race-ethnicity, etc.

This report analyzes the demographic characteristics of persons on the BadgerCare caseload during 2001 and 2002 and compares them to other similar family Medical Assistance (MA) eligible groups. In addition, persons on the BadgerCare caseload were compared with Wisconsin's total population using 2000 census data.

Populations Analyzed. We analyzed selected demographic characteristics of persons on the BadgerCare caseload and compared them with other similar family MA eligible groups. These family MA eligibility groups included clients who were on the Healthy Start caseload and clients in the MA eligibility categories of "AFDC" and "AFDC-Related" (i.e., people in families with dependent children who are eligible for MA due to their meeting income and/or other categorical requirements for AFDC that were in effect on July 16, 1996). The two AFDC eligibility groups are referred to as "family MA" in this report.

The demographic characteristics of both the 2001 and 2002 family MA populations were analyzed. In addition, we compared the demographic characteristics of BadgerCare clients with Wisconsin's total population. 2000 US census data were used to describe the characteristics of Wisconsin's total population.

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[2] Wisconsin Family Survey, Annual Reports 1998-2001, Division of Health Care Financing; Wisconsin Health Insurance Coverage, Annual Reports, 1999-2001, Division of Health Care Financing; Wisconsin Health and Family Outcomes, Office of Strategic Finance, 2002, data from Family Health Survey

[3] US Census Population Survey, Health Insurance Historical Tables, Health Insurance Coverage Status and Type of Coverage, by State--All Persons: 1987 to 2002

[4] U.S. Census Bureau, Low Income Children, Wisconsin: Three Year Averages 1993-2002

Data Sources and Analysis. We analyzed client information in the Medicaid Management Information System (MMIS) data warehouse to identify persons on the BadgerCare and family MA caseloads. The Recipient Analysis Universe of the Medicaid Evaluation Decision Support (MEDS) system was used to extract data on the demographic characteristics of family MA clients.

The term "BadgerCare caseload" is used to refer to persons who were enrolled in BadgerCare. The BadgerCare caseload consisted of all persons who were eligible to receive MA services under the BadgerCare program during the year. This included both persons enrolled during that calendar year, as well as continuing eligibles that were enrolled in a prior year and remained eligible for BadgerCare for some or all of the years examined. The same concept was used to define the caseloads of the two other family MA programs. While the BadgerCare and family MA caseload clients were eligible to receive MA services, some of them may not have used such services during the two-year time period.

Demographic Characteristics. The demographic characteristics that were analyzed included:

- Age - Five age groups were used to present comparative data on the age of people served by various family MA eligibility groups. Very young children age 0 to 5 were presented as one age group because Healthy Start uses more liberal income threshold eligibility criteria for children up to age 5 as compared with older children. Other youth age group breakouts paralleled those used in the BadgerCare evaluation by RTI [5] (October 2003 draft). Adults were broken into two age groups. The younger adult age group (age 19 to 59) is considered to represent people who were most likely to have dependent children in their household. Recent vital statistics data indicate that the vast majority (98%) of Wisconsin births were to women under age 40.[6] Persons age 60 and over were considered to represent people who are generally past the age of having dependent children in their household.

- Race/Ethnicity – Race and ethnicity categories used in the 2000 census were the basis for these breakouts. Any person identified as Hispanic was included in this race/ethnicity category regardless of other specific race data that was available. MEDS Reporting instructions treat Hispanic ethnicity as a race. The reporting of race/ethnicity data is not required of MA applicants. Race/ethnicity is the only demographic characteristic analyzed that had missing data. Ten percent of the family MA clients were missing data on their race/ethnicity. Less than 1% of Wisconsin's total population was missing 2000 US Census data on their race/ethnicity.

- Gender

- Type of County of Residence – The US census has established standards to designate each Wisconsin county as rural (N=39), urban metropolitan (N=20) or urban non-metropolitan (N=13). The designations are based on the total population of the county and its proximity to or containment of large population based cities or urbanized areas.

[5] Gavin, Norma, West, Nathan and Lenfestey, Nancy, "Evaluation of the BadgerCare Medicaid Demonstration," Research Triangle Institute (RTI) International Health, Social and Economic Research, October 2003.
[6] Wisconsin Births and Infant Deaths, 2001. DHFS Bureau of Health Information.

Objective Five: Compare and contrast BadgerCare participants, Medicaid recipients, and the Wisconsin population as a whole using selected measures of medical service utilization, for example, well baby exams, mammograms, treatment in a primary care clinic, etc.

In this section, BadgerCare clients' use of health care services is compared with that of other family MA clients and that of the total Wisconsin population. Services included in the analysis are preventive dental services, physician outpatient visits, emergency room use, lead screening, Pap tests and mammograms. Information on selected other specialty care services, HealthCheck exams and well child exams is also presented for BadgerCare and other family MA clients. A variety of information sources were used to obtain data on the use of these services by BadgerCare clients, other family MA clients and the total Wisconsin population. A detailed methodology is presented in the findings section of this report.

Satisfaction of BadgerCare Enrollees

Objective Six: Determine if the price of coverage (BadgerCare premium) presents a hardship for participants, and if premiums were a factor in their decision to enroll

Objective Seven: Determine if BadgerCare participants are satisfied with the array of health care services available to them under their coverage

Objective Eight: Determine if BadgerCare participants are satisfied or dissatisfied with waiting time for medical appointments

Objective Nine: Determine if BadgerCare participants are satisfied or dissatisfied with their ability to secure referrals to medical specialists

Objective Ten: Determine if BadgerCare participants believe their health has improved, stayed the same, or gotten worse since enrolling in BadgerCare

Objective Eleven: Determine if BadgerCare participants are satisfied with the quality of care received

The satisfaction of BadgerCare enrollees was measured using a nationally-used, standardized written survey, the "Consumer Assessment of Health Plans (CAHPS)." This survey was last used in Wisconsin in 1999 to assess the satisfaction of Medicaid enrollees. BadgerCare was not operational when the 1999 survey was initiated; hence the 2002 satisfaction survey is the first to include BadgerCare enrollees, in addition to Medicaid enrollees. In order to address evaluation objectives, five additional questions were added to the 2002 CAHPS instrument. These questions were answered by both Medicaid and BadgerCare respondents. The response alternatives on the additional questions were the same as used generally in the survey. The additional questions were:

- People can pay for their health insurance directly or out of their paycheck. Do you or your family pay any part of the cost of your health plan? *Yes or no.* If yes, proceed to question 38B. If no, proceed to question 39.

- In the last six months, how much of a problem, if any, was the price you or your family pays for your health plan? *A big problem or a small problem or not a problem.*

- Thinking back to when you started your current health plan, was the price of coverage a factor in choosing your current health plan? *Yes or no or can't recall.*

- Thinking back to when you started your current health plan, did you voluntarily leave a health insurance plan covered by your employer to join your current plan? *Yes or no or can't recall.*

- Thinking back to when you started your current health plan, were you satisfied with the benefits and services covered? *Yes or no or can't recall.*

- Thinking back to when you started your current health plan, how would you rate <u>your overall health</u> at the time you started your current plan? *Excellent, very good, good, fair, poor*

The last question was assessed in relation to a standard question on the survey:

- In general, how would you rate <u>your overall health</u> now? *Excellent, very good, good, fair, poor*

The 2002 CAHPS survey report was conducted, analyzed and written for the Division of Health Care Financing by APS Healthcare, which completed a final report in December 2003 ("2002 Medicaid's BadgerCare and Managed Care Recipient Satisfaction Survey Results"). OSF received data from APS Healthcare in May 2003 for additional analysis for this evaluation. Because fee-for-service enrollees were deemed appropriate for this BadgerCare evaluation, they are included in our discussion and analysis, but were not included in the DHCF/APS final report on managed care. Therefore, a close comparison of the two reports will show small differences in sample size, response rate, and so forth, due to the inclusion of 323 fee-for-service individuals who returned a survey, and were included in this report.

One goal of the DHCF/APS CAHPS report was to compare satisfaction with HMOs; therefore APS Healthcare used random sampling stratified by the number of enrollees in each of Wisconsin's thirteen participating HMOs and the fee-for-service category to select the sample respondents. This means that enrollees in HMOs with fewer enrollees were over-sampled to allow a true comparison among HMOs. On the other hand, the overall statewide results, which collapse responses across the HMOs and fee-for-service, could potentially be biased due to over-sampling some HMOs. Therefore, the data used to estimate statewide effects were subsequently weighted to eliminate the HMO sampling effect.

APS Healthcare represented respondents in the sample according to their proportion in the combined family Medicaid programs and BadgerCare. All survey respondents had to be

continuously enrolled in AFDC Medicaid or Healthy Start or BadgerCare for a six month period between February 25, 2002 and August 25, 2002 to be eligible for the survey. There were two versions of the survey, one for children and one for adults. The wording varied slightly between surveys, but the content was the same. Parents or caretakers answered for their children. APS Healthcare mailed a preliminary postcard on September 6, 2002 to 11,995 persons (including fee-for-service) who had been selected for the sample. The survey was mailed on September 18, 2002. The initial mailing was followed by a second mailing to non-responders on October 30, 2002. Persons still not responding were telephoned until the targeted sample size for an HMO or fee-for-service was reached, or until the sample was exhausted. The telephone survey was completed by the end of December, 2002. An overall goal of 40 percent response rate is recommended for CAHPS.

APS Healthcare provided the data used by OSF Evaluation to assess the satisfaction of BadgerCare respondents. Included were the results for selected individual survey questions and for the seven summary variables (five aggregated survey items and two key global questions). Of the 11,995 sampled, APS Healthcare found 142 to be ineligible or deceased, leaving a potential group of 11,853. While the number of responses varied very slightly by item, the total number of completed surveys from all HMO and fee-for-service individuals was 4,605. The overall response rate was 38.9 percent, which was slightly lower than the target response rate of 40 percent. Of these, 3,145 were from Medicaid enrollees, and 1,460 from BadgerCare recipients. The response rate for BadgerCare (48.3 percent was significantly greater than for Medicaid recipients (35.6 percent) (chi square=153.4, df=1, probability less than 1 percent).[7]

The analysis included in this report was of two types. First, the responses on selected items for BadgerCare recipients alone (no family Medicaid) are considered and charted to present a picture of whether or not BadgerCare enrollees were satisfied with their services, providers, waiting intervals, premium fees, and so forth. These analyses directly address the evaluation objectives listed above.

Second, the seven composite satisfaction variables for Medicaid and BadgerCare are compared. Because the groups differed on certain key demographic variables, and because the response rate differed between Medicaid and BadgerCare, the data from all individual, composite, and global variables were statistically weighted by APS Healthcare to eliminate these differences. The weighted data were used in the analyses in this report.

BadgerCare and Substitution of Coverage

Objective Twelve: Describe BadgerCare program provisions designed to prevent enrollees from dropping other insurance coverage in order to participate in BadgerCare, and assess whether or not BadgerCare enrollees dropped other insurance coverage in order to participate in BadgerCare

Program descriptions and reports were used to describe and assess the program provisions designed to prevent enrollees from dropping other health insurance coverage.

[7] 2002 Medicaid BadgerCare and Managed Care Recipient Satisfaction Survey Results, December 2003, Prepared by APS Healthcare for the Division of Health Care Financing

Objective Thirteen: Determine if Wisconsin employers are currently changing their health care benefit packages, the nature of any changes (increasing, decreasing, dropping), the reasons for any changes, and the possible impact on BadgerCare

Secondary data sources were used to address this objective. A primary source of information on the number of Wisconsin private sector employers who offer health care benefits and the type of benefits they provide is the insurance component of the annual Medical Expenditure Panel Survey (MEPS). The MEPS Insurance Component collects data on the number and types of private insurance plans offered, benefits associated with these plans, premiums, and contributions by employers and employees and employer characteristics.[8] The MEPS is co-sponsored by the Agency for Healthcare Research and Quality (AHRQ) and the National Center for Health Statistics (NCHS). 2001 is the most recent data available.

The MEPS survey also provides information on insurance coverage for persons working in low wage establishments. Because the criteria for low wage changed in 2000, making comparisons across the 1999-2000 survey years is not recommended. The definition for "low wage" changed from $6.50 an hour or less in 1999 to earning at or below the 25th percentile for all hourly wages in the United States based on data from the Bureau of Labor Statistics ($9.50 an hour or less for 2000 and 2001).[9] Information about low wage firms for 1999 included in this paper is for reference only.

Information on low wage firms in this paper is presented for establishments having 50% or more "low wage" employees. It also is presented using wage "quartiles." The MEPS Survey established 4 groups of private-sector establishments, each containing 25% of the total U.S. employment. Establishments in the lowest of the four quartiles (1st quartile) have lower average payrolls per employee (compensation excluding fringe benefits) than any establishment in the 2nd quartile.[10] For 2002 and 2001, persons in the lowest (1st) wage quartile had an average wage of $9.50 per hour.

The information analyzed from the MEPS survey in this section reflects the private sector. The MEPS survey also collects information on employer-sponsored insurance for the public sector, but the information is not summarized at the state level.

BadgerCare and HMO Capacity

Objective Fourteen: Determine whether or not BadgerCare resulted in an increase in HMO capacity in Wisconsin

This objective was addressed by analyzing enrollment data for family Medicaid (AFDC and Healthy Start Children and Pregnant Women) and BadgerCare enrollment, program records concerning the number of HMOs participating before and after BadgerCare, and discussion with

[8] "Estimation of Expenditures and Enrollments for Employer-sponsored Health Insurance, MEPS Methodology Report 14."
[9] Technical Notes and Survey Documentation for the MEPS Insurance Component.
[10] Technical Notes and Survey Documentation for the MEPS Insurance Component.

Bureau of Managed Care staff. The number of persons in HMOs, the percent of enrollees in HMOs, and the number of HMOs participating in Wisconsin's managed care program were analyzed.

Findings

BadgerCare's Impact on the Uninsured

Objective One: Describe BadgerCare outreach and enrollment policies and procedures, assess whether these efforts resulted in eligible children and adults being enrolled in Medicaid, and estimate the number of children and adults enrolled in Medicaid due to BadgerCare.

BadgerCare was carefully designed to increase the number of insured children and families in Wisconsin. The program's outreach and enrollment activities were intended to reach uninsured persons who were eligible for family Medicaid (AFDC Medicaid and Healthy Start), as well as the BadgerCare target group. This effort was very successful. A sharp increase in the number of Healthy Start children and pregnant mothers occurred in the months following April 1999, just as BadgerCare outreach and enrollment started. The high rate of growth in Healthy Start continued through September 2001, before slowing somewhat. BadgerCare also grew very quickly, and enrollment quickly surpassed projected expectations. AFDC Medicaid enrollment did not show rapid upward growth; the rate of enrollment dropped somewhat during the year following BadgerCare start-up, and remained rather static for another year before beginning to increase around April 2001, two years after BadgerCare began.

Descriptions of BadgerCare outreach and enrollment policies and procedures are based on DHFS' annual SCHIP reports to CMS,[11] which described these activities as they occurred, the Sirica study[12]and on "The BadgerCare Stakeholder Survey Phone Survey."[13] Medicaid and BadgerCare program enrollment data were analyzed to determine enrollment trends in BadgerCare and family Medicaid (Healthy Start and AFDC Medicaid), and to calculate the rate of growth in enrollment before and after the start of BadgerCare. These same enrollment data were also used to estimate the number of children and adults enrolled in family Medicaid after BadgerCare was introduced.

BadgerCare included structural features to enhance enrollment, as well as outreach efforts. Two key structural features were designing BadgerCare as a Medicaid expansion program, rather than as a stand-alone SCHIP program and including adult family members in BadgerCare, rather than children only.[14]

[11] Annual Reports of State Children's Health Insurance Plans Under Title XXI of the Social Security Act, Federal Fiscal Year 2000-3, Wisconsin Division of Health Care Financing.
[12] The Origins and Implementation of BadgerCare: Wisconsin's Experience with the State Children's Health Insurance Program (SCHIP), by Coimbra Sirica, January 2001.
[13] The BadgerCare Stakeholder Survey Phone Survey 2000, Covering Kids Wisconsin, funded by The Robert Wood Johnson Foundation.
[14] The Origins and Implementation of BadgerCare: Wisconsin's Experience with the State Children's Health Insurance Program (SCHIP), by Coimbra Sirica, January 2001.

Creating BadgerCare as an expansion of Wisconsin's Medicaid Plan allowed the DHFS to build on the pre-existing Medicaid framework in Wisconsin. Medicaid and BadgerCare enrollees share an established eligibility data system (CARES), which was being used for Medicaid, W-2, and food stamps before BadgerCare start-up. As noted previously, all applicants are first tested for AFDC Medicaid and Healthy Start, and enrolled in these programs if eligible for them. If ineligible for AFDC Medicaid and Healthy Start, applicants are then screened for BadgerCare. The same county offices and agencies are used for applicants. The shared application process and physical locations allowed BadgerCare to expand much more quickly since new facilities were not needed, and provides a single point of contact for eligible children and families eligible for any of the Medicaid packages.[15]

The same benefit package provided to Medicaid recipients is also provided to BadgerCare enrollees. This allows the inclusion of BadgerCare within Wisconsin's Medicaid utilization and payment system, and the use of same fiscal intermediary for both programs. Integrating BadgerCare with pre-existing systems was less time consuming and less costly than developing a new framework for a different benefit package. This also facilitated the use of the same service delivery system and health care providers, who were spared having multiple client groups and rules.

This strategy of building BadgerCare on the pre-existing Medicaid framework allowed for an earlier program start-up, rapid growth, and an easier transition for providers. It also had the potential to attract and increase the number of AFDC Medicaid and Healthy Start enrollees due to the extensive outreach efforts that were part of the BadgerCare start-up.

BadgerCare outreach initiatives included training for local service agencies to learn about BadgerCare and act as enrollment stations. One such effort was the "Covering Kids Expansion," a Robert Wood Johnson Foundation project in Wisconsin (one of 50 state projects), that with additional funding from the Wisconsin DHFS, worked with community organizations, health care providers, and translators to enhance the statewide network for BadgerCare and family Medicaid enrollment.

Developing BadgerCare as a family-centered program, rather than as a child only program, was also intended to provide an incentive for parents to learn about the program and apply. Research by Thorpe and Florence[16] found that family based expansions brought in 75% of eligibles compared to 45% for child-only expansions.

Outreach was also done at schools. Some school districts offered a sign-off on free or reduced price lunch prices, the application for which allowed a local BadgerCare outstation to contact the family. A Medicaid application was attached to the lunch application form and mailed to 50,000 families. A response of 4,000 application forms resulted in several hundred new families to family Medicaid or BadgerCare.

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[15] Evaluation of the BadgerCare Medicaid Demonstration, Case Study Report, Research Triangle Institute International, July 2002.

[16] Covering Uninsured Children and Their Parents: Estimated Costs and Number of Newly Insured by K.E. Thorpe and C.S. Florence, Institute for Health Services Research, Tulane University, 1998.

BadgerCare was advertised on television during the start-up period. The Division of Health Care Financing (DHCF) reported that 34% of the calls to a Badgercare telephone line during the first three months of enrollment were prompted by the television ads.

The program was named BadgerCare in order to distinguish it from the Medicaid program, and make the program more palatable to families who wanted to avoid the stigma associated with welfare and Medicaid.

A mail-in application, and a mail-in re-certification with simplified verification requirements were implemented in July 2001, in order to make enrollment and continuation easier for participants. Automated Health Systems provided statewide training to community organizations and health care providers on these Medicaid and BadgerCare program simplification initiatives.

The Dane County Department of Human Services piloted a simplified application process and outreach to reach targeted families whose primary language is not English, with incomes above 150% of the FPL, and having teenagers. The revised BadgerCare brochure adds text and photos of teens, and describes the benefits of paying a premium for health insurance. Funded by the DHFS, Dane County and local health care providers, this project facilitated the enrollment of minorities, particularly in Dane County's growing Hispanic population.

As noted previously, all BadgerCare applicants are first screened for family Medicaid eligibility, and, if eligible, are enrolled in Healthy Start Medicaid (Healthy Start) or AFDC Medicaid rather than BadgerCare. Therefore, all of the BadgerCare outreach efforts described above have the added advantage of drawing people into family Medicaid programs if they are eligible.

Because all applicants complete the same eligibility process, and are checked for AFDC Medicaid and Healthy Start before being screened for BadgerCare, it is impossible to count the exact number of persons who came to apply for BadgerCare, but were screened into AFDC Medicaid and Healthy Start instead. However, changes in enrollment rates and patterns immediately after BadgerCare start-up may indicate any impact of the new program, particularly if there is a marked difference from the period before start-up. Examined in this context were enrollment data for AFDC Medicaid and Healthy Start for the year before BadgerCare, and for the two years after the start-up date, or April 1999 through March 2001. Additionally, enrollment data for the three years since then (April 2001-March 2004) were analyzed.

Enrollment numbers for these three programs are shown in Table 1 below. Monthly enrollment data were averaged across six month periods starting in April 1998, a year before BadgerCare for teens began. The data for the year preceding BadgerCare show slight declines in both AFDC Medicaid and Healthy Start enrollment. However, in the two years following the start of BadgerCare, there is a marked increase in Healthy Start enrollment from 82,150 in April-September 1999 to 104,210 in October 2000-March 2001. This represents an increase of 26.9 percent over the two-year period. AFDC Medicaid grew at a much slower rate. Enrollment increased from 131,678 in April-September 1999 to 134,719 in October 2000-March 2001. This represents an increase of about 2.3 percent over the period.

Table 1
Six Month Trends,* April 1998-March 2001 for AFDC Medicaid, Healthy Start and BadgerCare

	April 1998-September 1998	October 1998-March 1999	April 1999-September 1999	October 1999-March 2000	April 2000-September 2000	October 2000-March 2001
AFDC Medicaid	137,712	135,529 -1.6%	131,678 -2.8%	127,949 -2.8%	134,627 +5.8%	134,719 +0.1%
Healthy Start	81,190	80,478 -0.8%	82,150 +2.1%	88,733 +8.0%	98,382 +10.9%	104,210 +5.9%
BadgerCare	0	0	9,934	50,359 +407%	65,704 +30.5%	74,857 +13.9%

*Time periods based on FFY and initiation of BadgerCare for teens ages 15-18 in families below 100 percent FPL on April 1, 1999.

An additional 99,958 uninsured people were covered in the first two years after BadgerCare started, including 74,857 enrolled in BadgerCare, 22,060 in Healthy Start and 3,041 in AFDC Medicaid. Based on the proportion of children and adults enrolled in April 2001, an estimated 45,480 (45.5 percent) were children and 54,478 (54.5 percent) were adults. These include 20,626 children and 1,434 adults in Healthy Start, an estimated 2,068 children and 973 adults in AFDC Medicaid, and 22,786 children and 52,071 adults in BadgerCare.

Table 1 shows program enrollment for the year preceding BadgerCare and for the two years following its implementation. Table 2 below shows the last three years of the five year period since BadgerCare start-up, from April 2001 through March 2004. During the last three years, the rate of children and adults enrolled in Medicaid and Healthy Start has continued to increase, although the rate of increase in AFDC Medicaid has been greater than that for Healthy Start.

Table 2
Six Month Trends, April 2001-March 2004 for AFDC Medicaid, Healthy Start and BadgerCare

	April 2001-September 2001	October 2001-March 2002	April 2002-September 2002	October 2002-March 2003	April 2003-September 2003	October 2003-March 2004
AFDC Medicaid	141,880 +5.3%	163,314 +15.1%	186,310 +14.1%	200,117 +7.4%	210,927 +5.4%	221,998 +5.2%
Healthy Start	113,449 +8.9%	116,681 +2.8%	118,393 +1.5%	121,120 +2.3%	126,318 +4.3%	130,782 +3.5%
BadgerCare	82,132 +9.7%	90,024 +9.6%	97,081 +7.8%	104,182 +7.3%	109,700 +5.3%	114,172 +4.1%

Over the last three years, the total growth rate in AFDC Medicaid has been about 56.5 percent; the growth rate in Healthy Start has been 15.3 percent, and BadgerCare has grown by 39.0 percent. About 129,491 enrollees have been added to all three programs. Of these, most (81,165 or 62.7 percent) have been children, while another 48,326 (37.3 percent) have been adults. Most of the additional children have been enrolled in AFDC Medicaid and Healthy Start; BadgerCare adults continue to outnumber children by about a 60-40 ratio.

The BadgerCare program, including its unique and extensive outreach and enrollment efforts, appears to have added to the increased numbers of eligible children and adults being enrolled in Wisconsin's Healthy Start program. Growth in both Healthy Start and AFDC Medicaid was flat

or declining in the year preceding BadgerCare. The marked upswing in Healthy Start coincides with BadgerCare and an additional 22,060 (20,626 children and 1,434 adults) were added to the program in the two years following April 1999. It is more difficult to attribute the small growth in AFDC Medicaid during this period to BadgerCare since its enrollment actually continued to decline for a year after BadgerCare start-up, until an increase of 5.8 percent occurred from April 2000-September 2000. Furthermore, growth then remained static (less than one percent) from October 2000 through March 2001.

In the last three years, all three programs have grown. It is probably the case that some increase in the number of new family Medicaid enrollees is due to the continuing BadgerCare outreach; however, the downturn in the economy and increased unemployment are probably more important factors in the growth of AFDC Medicaid since April 2001.

Objective Two: Determine if BadgerCare increased the number and rate of Wisconsin residents who were covered by health insurance, particularly children.

BadgerCare increased the number of children and adults covered by health insurance in Wisconsin. The start of BadgerCare also coincides with a drop in the percentage rate of uninsured families as measured by Wisconsin Bureau of Health Information survey data. US Census data shows that the percentage of all uninsured declined in Wisconsin from 1998 through 2000, and that the percentage of uninsured low income children in Wisconsin has also declined following the introduction of BadgerCare.

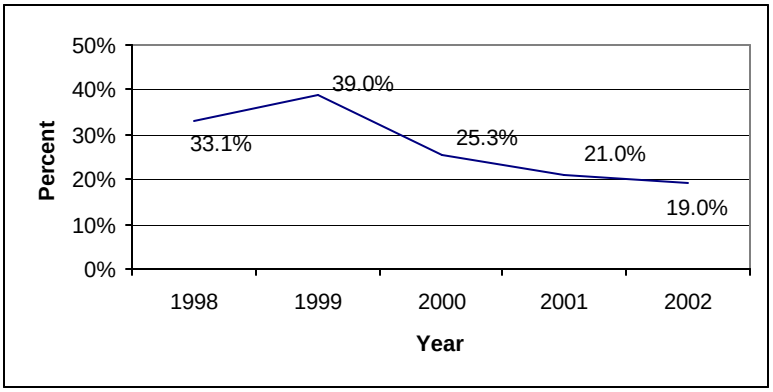
Program enrollment data were analyzed to estimate the number of previously uninsured children and adults who were covered by health insurance after BadgerCare. The rate of Wisconsin's health insurance coverage for low income families, before and after the BadgerCare program, was examined based on insurance trends from 1998 through 2002 using annual reports based on Wisconsin's annual Family Health Survey. United States Census population surveys were used to determine the overall trends in Wisconsin's uninsured from 1998 through 2000. As a second measure focusing on low income children, United States Census data for Wisconsin from 1993-2002 were also examined.

In January 2000, six months after BadgerCare start-up, enrollees numbered 53,622. One year later, in January 2001, BadgerCare covered 78,659 previously uninsured persons. By January 2002, 92,409 people were enrolled in BadgerCare, 105,321 were participating in January 2003, and 114,711 were enrolled by January 2004. In January 2004, 37,920 (33 percent) were children, while 76,791 (67 percent) were adults.

As noted previously, an additional 22,060 people, including 20,626 children and 1,434 adults were enrolled in Healthy Start in the two years after BadgerCare start-up, following a prolonged period of no growth in that program. Some 2,068 children and 973 adults were also enrolled in AFDC Medicaid during this period, following a year when enrollment had been decreasing.

Based on estimates from the Bureau of Health Information's annual reports "Wisconsin Family Health Survey" and "Wisconsin Health Insurance Coverage,"[17] the number of uninsured in Wisconsin with incomes under 200 percent FPL with children under 20 years of age increased from 33.1 percent in 1998, the year before BadgerCare to 39 percent in 1999. However, in the years since, the percent of uninsured has dropped from 39 percent to 25.3 percent in 2001, to 21 percent in 2001, and to 19 percent in 2002.

Figure 1
Wisconsin Low-Income Uninsured Families with Children, 1998-2002



Furthermore, the US Census data (Table 3) indicate that the total percentage of uninsured dropped for Wisconsin during the period from 1998 through 2000, when BadgerCare was being implemented, although the most recent data in 2002 indicate an upturn.

Table 3
Percent Uninsured in Wisconsin, Total Population 1998-2002

	1998	1999	2000	2001	2002
Percent Uninsured	11.8%	10.2%	7.6%	7.7%	9.8%

US Census Population Survey, Health Insurance Historical Tables, Health Insurance Coverage Status and Type of Coverage, by State--All Persons: 1987 to 2002

BadgerCare is also associated with a reduction in the number of poor children who are uninsured in Wisconsin. Data from the US Census Bureau, Table 5 below, shows a spike in uninsured low-income children in Wisconsin during the period 1997-1999 after W2 was implemented. This has been followed by a steady decline in the percent uninsured after BadgerCare was implemented in mid-1999. The Census estimates are given in three year averages.

[17] Wisconsin Family Survey, Annual Reports 1998-2001, Division of Health Care Financing; Wisconsin Health Insurance Coverage, Annual Reports, 1999-2001, Division of Health Care Financing; Wisconsin Health and Family Outcomes, Office of Strategic Finance, 2002, data from Family Health Survey

Table 4
Uninsured Low Income Children, 1993-2002, Wisconsin

	# at or below 200% FPL under 19 years	% of all children under 19 years	# at or below 200% FPL under 19 years, no coverage	% at or below 200% FPL under 19 years, no coverage	% all under 19 years, no coverage
93-94-95	499,000	33.8%	71,000	14.2%	4.8%
94-95-96	501,000	33.4%	62,000	12.4%	4.1%
95-96-97	477,000	31.7%	54,000	11.3%	3.5%
96-97-98	435,000	31%	46,000	10.6%	3.3%
97-98-99	432,000	29.7%	66,000	15.3%	4.4%
98-99-00	469,000	30.8%	60,000	12.8%	3.9%
99-00-01	438,000	30.3%	57,000	13.0%	3.8%
00-01-02	414,000	29.9%	36,000	8.7%	2.6%

U.S. Census Bureau. Low Income Children, Wisconsin: Three Year Averages 1993-2002
NOTE: Estimates beginning with 98-99-00 reflect an insurance verification question implemented in 2000, and are not therefore strictly comparable to averages from earlier years.

An estimated 414,000 children under 19 lived at or below 200 percent of poverty in Wisconsin from 2000-2002. These children represent about 29.9 percent of all children in Wisconsin during this period. About 36,000 of these children, on average, were uninsured. This represents 8.7% of all children in the range below 200 percent FPL, and about 2.6 percent of all children under 19 years of age in Wisconsin. Both rates have decreased since BadgerCare started.

Objective 3: Assess whether or not enrolling entire families in BadgerCare increased the number and rate of insured children compared to SCHIP programs in which only children were enrolled.

Thorpe and Florence[18] were the first to show that "family" health insurance programs, which included both children and their parents, were more effective at reducing the rate of uninsured children compared to "children only" programs. The former insured 75 percent of children, compared to 45 percent in the "children only" group.

Other studies have replicated this finding for SCHIP programs. Ku and Broadus (2000)[19] found that three states which included parents in their Medicaid coverage increased the coverage of eligible children from 51% in 1990 to 67% in 1998, while states that did not include parents increased coverage for children from 51% to 54% (Dubay and Kenny, 2001)[20].

[18] Covering Uninsured Children and Their Parents: Estimated Costs and Number of Newly Insured by K.E. Thorpe and C.S. Florence, Institute for Health Services Research, Tulane University, 1998.
[19] The Importance of Family-Based Insurance Expansions: New Research Findings about State Health Reforms, Leighton Ku and Matthew Broaddus, Center on Budget and Policy Priorities, 2000.
[20] Covering Parents through Medicaid and SCHIP: Potential Benefits to Low Income Parents and Children, Lisa Dubay and Genevieve Kenney for the Kaiser Commission of Medicaid and the Uninsured, 2001

BadgerCare Participant Demographics and Services Used

Objective Four: Compare and contrast BadgerCare participants, Medicaid recipients, and the Wisconsin population as a whole using demographic indicators such as age, sex, income, race-ethnicity, etc.

This section analyzes the demographic characteristics of persons on the BadgerCare caseload during 2001 and 2002 and compares them to other similar family Medicaid eligible groups. In addition, persons on the BadgerCare caseload were compared with Wisconsin's total population using 2000 census data. Further, a continuing objective of BadgerCare is to increase access to health insurance coverage. One performance goal, in this context is that "enrollees in BadgerCare will be more similar demographically to the general population than to the MA population."[21] This hypothesis is also examined.

The analysis showed that BadgerCare expands publicly financed health care coverage to adults with dependent children and to people living in rural counties. The analysis also showed that BadgerCare serves proportionately more Caucasians and fewer minorities than the other two family MA programs. BadgerCare serves more females than males, as do the other two family MA programs. There were no noticeable differences in the demographic characteristics of the BadgerCare caseloads in 2001 as compared with 2002.

A detailed description of the methodology used for this objective is given in the Methodology section. The demographic characteristics of the 2001 and 2002 family MA populations were analyzed, along with US Census data for the Wisconsin population as a whole.
Client information from the Medicaid Management Information System (MMIS) data warehouse was used to identify persons on the BadgerCare and family Medicaid caseloads, and the Recipient Analysis Universe of the Medicaid Evaluation Decision Support (MEDS) system was used to extract data on the demographic characteristics of family MA clients.

The demographic characteristics that were analyzed were age, race/ethnicity, gender and county of residence.

Each demographic characteristic is described in the narrative, and in pie chart illustrations that follow the narrative discussion. In any case where less than 1% of an eligibility group exhibited a demographic characteristic, the pie chart does not visually display this characteristic for that eligibility group. The actual numbers of persons exhibiting each demographic characteristic are shown in Appendices I and II.

Age. Figures 2 and 3 below present data on the age distribution of the three family MA program caseloads in 2001 and 2002 as well as the age distribution of Wisconsin's population in total.

Family MA Programs. BadgerCare expands publicly financed health care coverage to adults with dependent children. Among the three family MA programs, BadgerCare serves the greatest proportion of adults age 19 to 59. About two-thirds of the BadgerCare caseload consists of

[21] Annual Report of the State Children's Health Insurance Plans Under Title XXI of the Social Security Act, Federal Fiscal Year 2003, Division of Health Care Financing

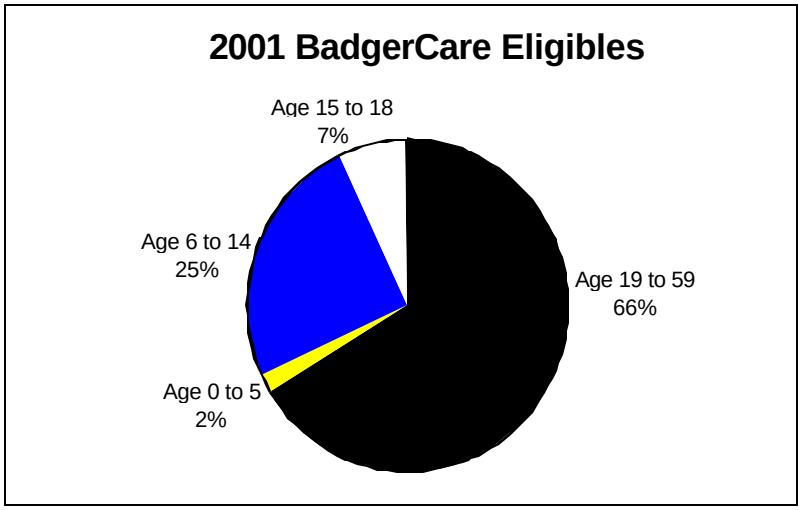
adults age 19 to 59. In comparison, about one-third of the AFDC-MA caseload was age 19 to 59 and 9% of the Healthy Start caseload was age 19 to 59. Healthy Start primarily provides health care coverage to children and particularly to young children. Over half of the Healthy Start caseload is under age six. A relatively small proportion of the BadgerCare caseload consists of very young children. Only 2% of BadgerCare clients were under age six. About one-third of the AFDC-MA caseload consists of children under age six.

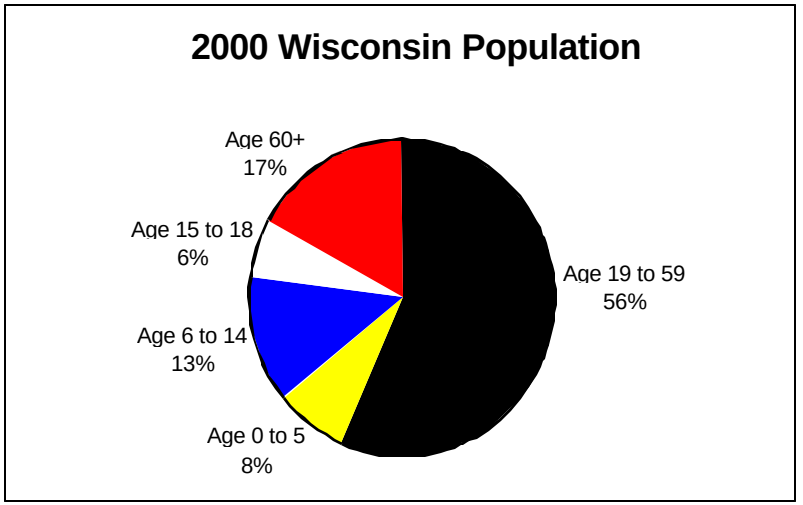
BadgerCare Compared with Wisconsin. BadgerCare serves proportionately more adults age 19 to 59 than are in Wisconsin's total population. Just over half (56%) of Wisconsin's population falls into this age group as compared with about two-thirds of the BadgerCare caseload. Only 2% of BadgerCare clients were under age six, as compared with 8% of Wisconsin's population. A negligible[22] proportion of the caseloads of BadgerCare and other family MA programs consisted of people age 60 and over, as compared with 17% of Wisconsin's population.

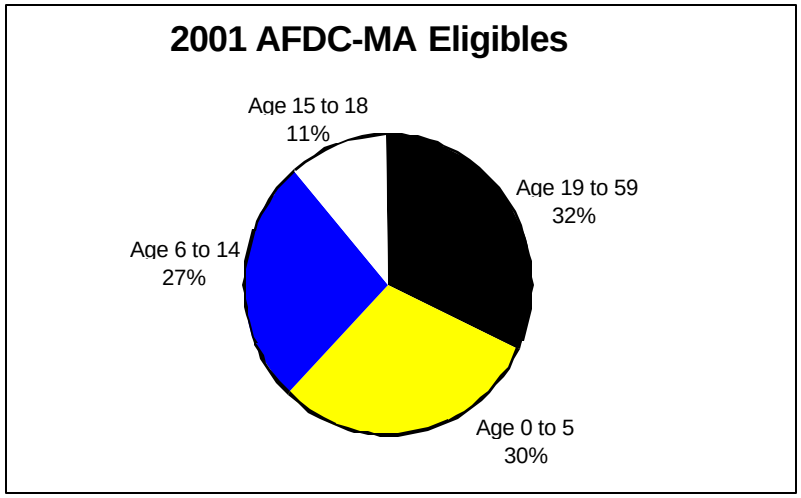
BadgerCare Trends. The age distribution of BadgerCare's caseload was similar in both 2002 and 2001. The proportion of the very young caseload age 0 to 2 remained constant. The proportion of children in each of the older age groups increased slightly by 1% apiece in 2002. The proportion of adults age 19 to 59 in the BadgerCare caseload decreased from 66% in 2001 to 64% in 2002**.**

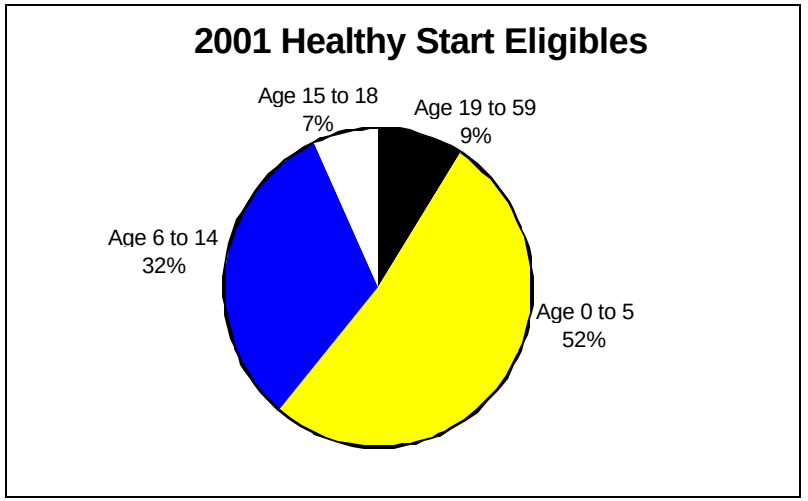
[22] 0.1% of the combined caseloads of the three family MA programs were age 60 and over.

Figure 2
Age Groups Among Family Medical Assistance 2001 Eligibles* and Wisconsin's Total Population





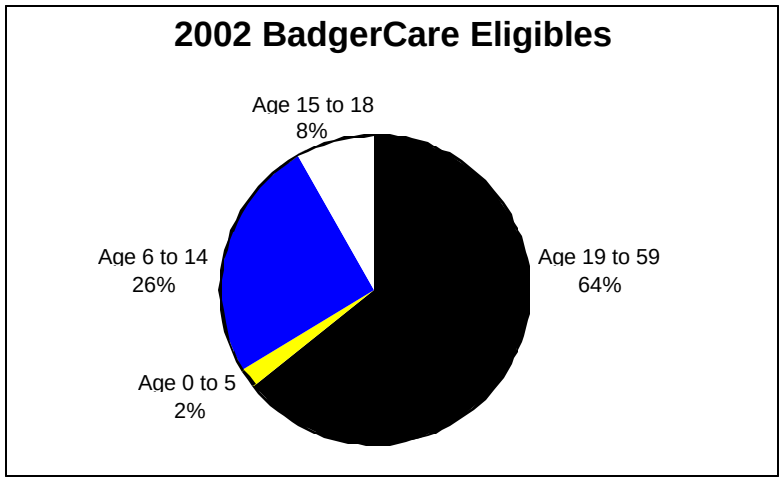


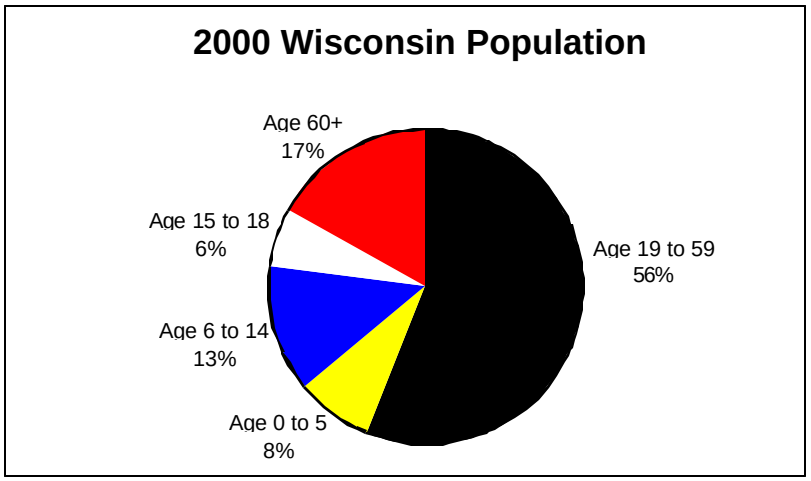


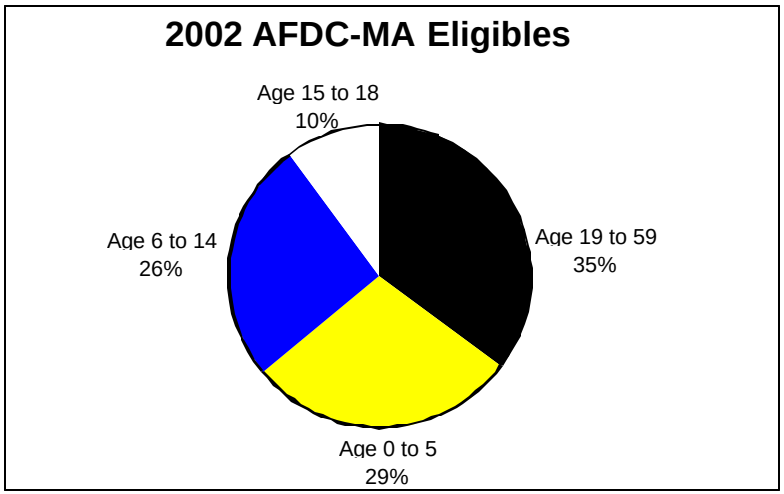
* A negligible percentage (0.1%) of family MA clients were age 60 and over and they are not specifically illustrated in the 3 family MA pie charts.

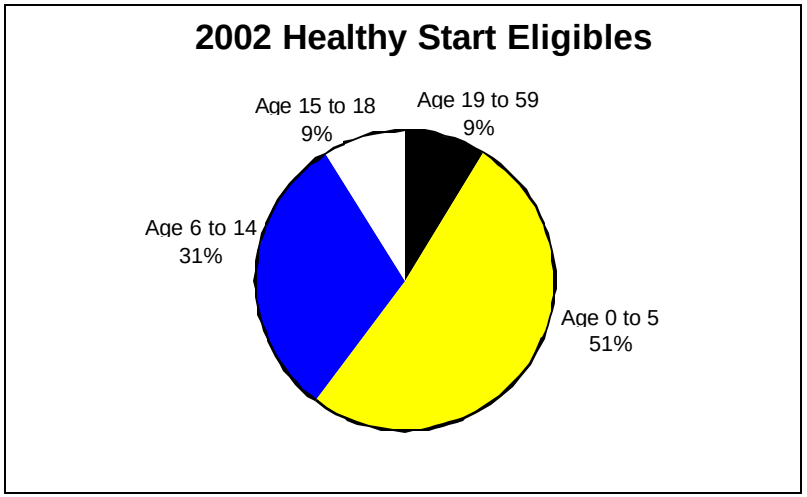
Figure 3

Age Groups Among Family Medical Assistance 2002 Eligibles* and Wisconsin's Total Population









* A negligible percentage (0.1%) of family MA clients were age 60 and over and they are not specifically illustrated in the 3 family MA pie charts.

Race/Ethnicity. Figures 4 and 5 below present data on the racial/ethnic distribution of the three family MA program caseloads in 2001 and 2002 as well as Wisconsin's population in total.

Family MA Programs. BadgerCare serves proportionately more Caucasians and fewer minorities than the other two family MA programs, especially the AFDC-MA caseload. While under half of the AFDC-MA caseload was Caucasian, just over two-thirds of the BadgerCare caseload was Caucasian. Healthy Start served proportionately slightly fewer Caucasians than BadgerCare. Among Healthy Start eligibles, 61% were Caucasians.

African Americans comprised the greatest number of minorities served by BadgerCare, accounting for 16% of the caseload. Healthy Start served a similar but slightly higher proportion of African Americans. Over a third of the AFDC-MA caseload was African American. Hispanics comprised 8% of the BadgerCare caseload. The Healthy Start and AFDC-MA caseloads included a slightly higher proportion of Hispanics than did BadgerCare. The Healthy Start and AFDC-MA caseloads included a similar proportion of Native Americans, as did BadgerCare (2%). Similar proportions of Asians were included in the BadgerCare and AFDC-MA (3%) caseloads. Healthy Start served proportionately more Asians (6%) than did BadgerCare.

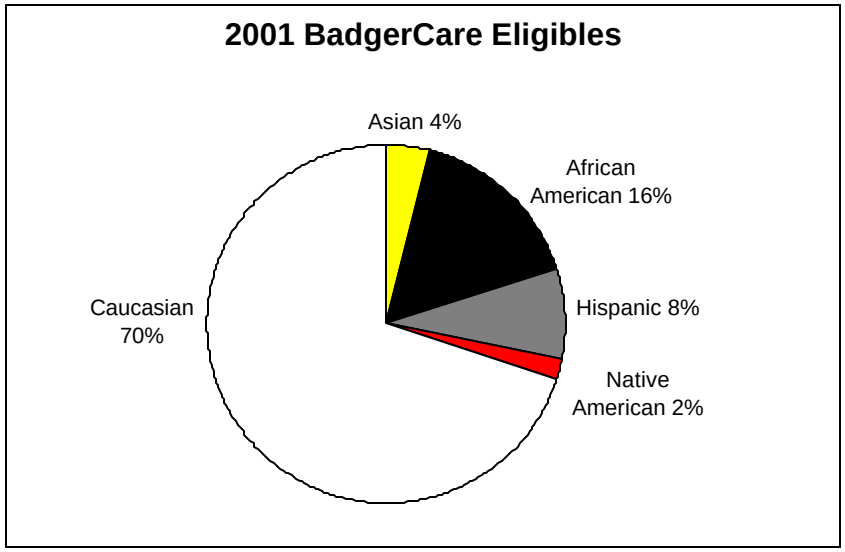
BadgerCare Compared with Wisconsin. BadgerCare serves proportionately fewer Caucasians and more minorities than their statewide incidence. While 87% of Wisconsin residents are Caucasian, just over two-thirds of the BadgerCare caseload is Caucasian. African Americans are the largest minority group (6%) in Wisconsin and they account for 16% of the BadgerCare caseload. Hispanics comprise 3% of Wisconsin's population and 8% of the BadgerCare caseload. Asians comprise 2% of Wisconsin's population and about 4% of the BadgerCare caseload. Native Americans comprise 1% of Wisconsin's population and 2% of the BadgerCare caseload.

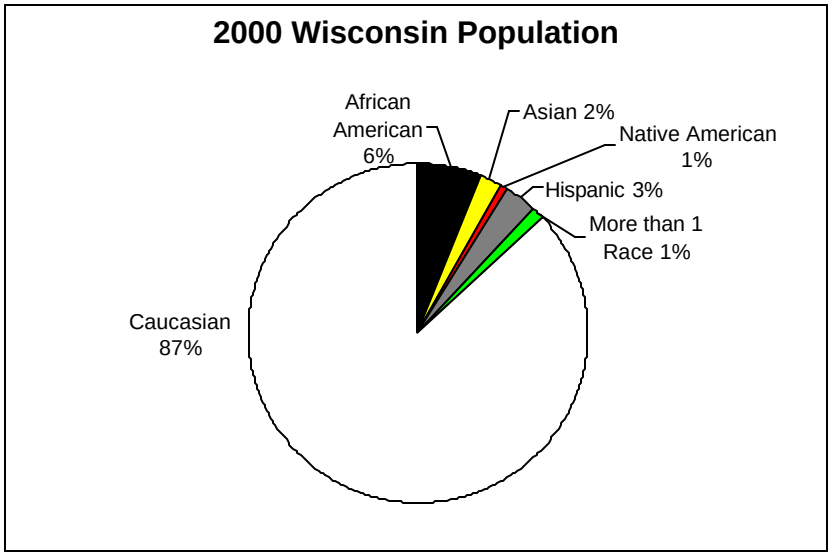
In assessing the racial/ethnic composition of the BadgerCare and other family MA programs, it is important to acknowledge that eligibility for these MA programs is based in part on income. Minorities in Wisconsin have much higher poverty rates than Caucasians[23] and consequently, one would expect more persons that are members of racial/ethnic minority groups to be eligible for and served by these family MA programs.

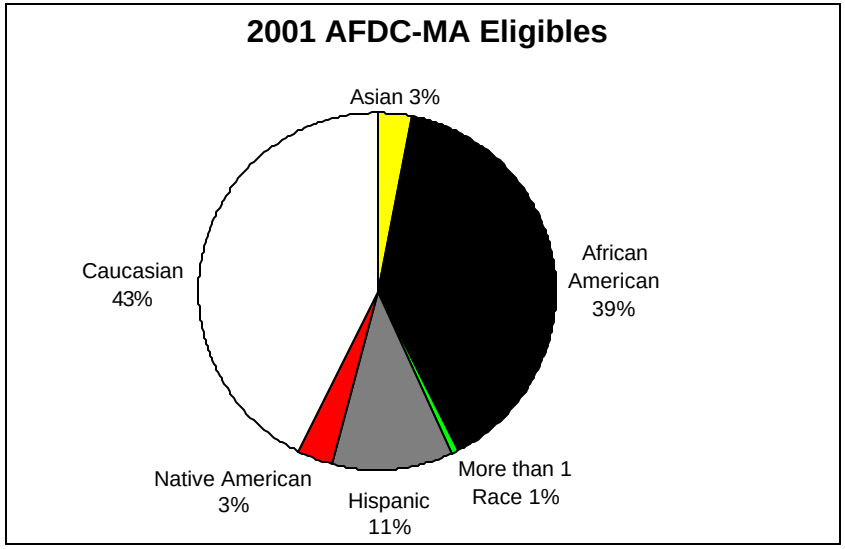
BadgerCare Trends. The racial/ethnic mix of the BadgerCare caseload was similar in both 2002 and 2001. The proportion of Caucasians served by BadgerCare increased from 70% in 2001 to 71% in 2002. The proportion of the BadgerCare caseload that was African American (16%), Hispanic (8%) or Native American (2%) remained constant between 2001 and 2002. The proportion of the BadgerCare caseload that was Asian decreased from 4% in 2001 to 3% in 2002.

[23] U.S. Census Bureau: Census 2000 Summary File 3 Tables, P159A-H. This report concluded that poverty levels by race/ethnicity were: Caucasians – 6.5%, African Americans – 31.8%, Hispanics – 21.7%, Asians – 19.8%, Native Americans – 21.7% and multi-racial persons – 18.6%.

Figure 4
Race and Ethnicity of Family Medical Assistance 2001 Eligibles and Wisconsin's Total Population







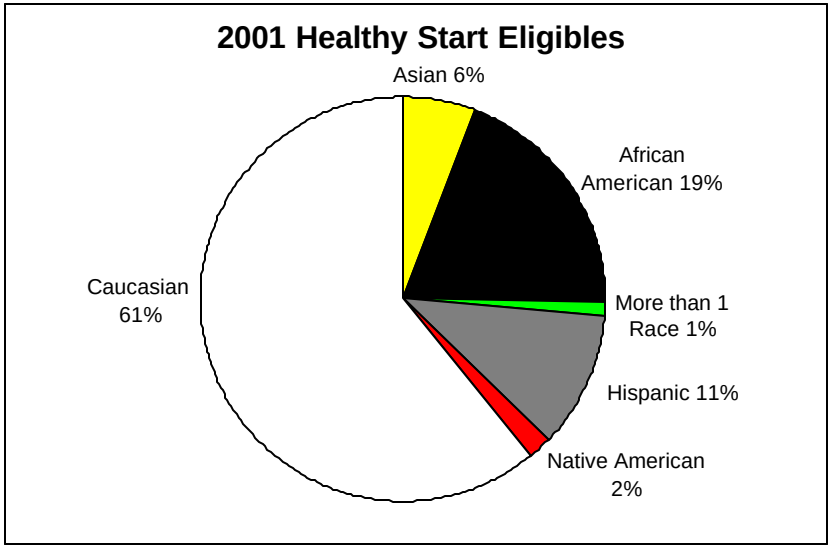
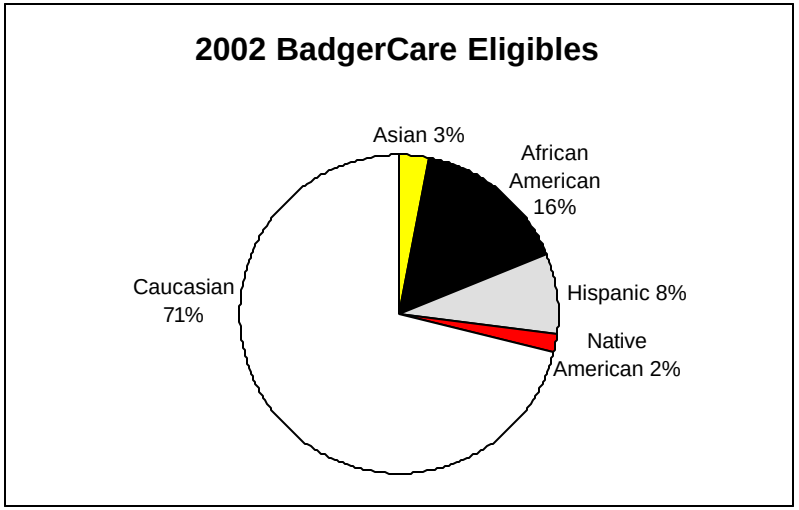
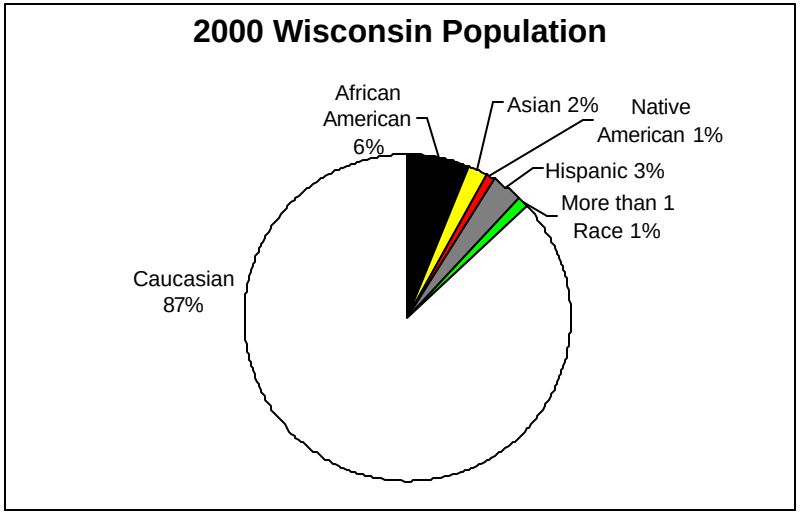
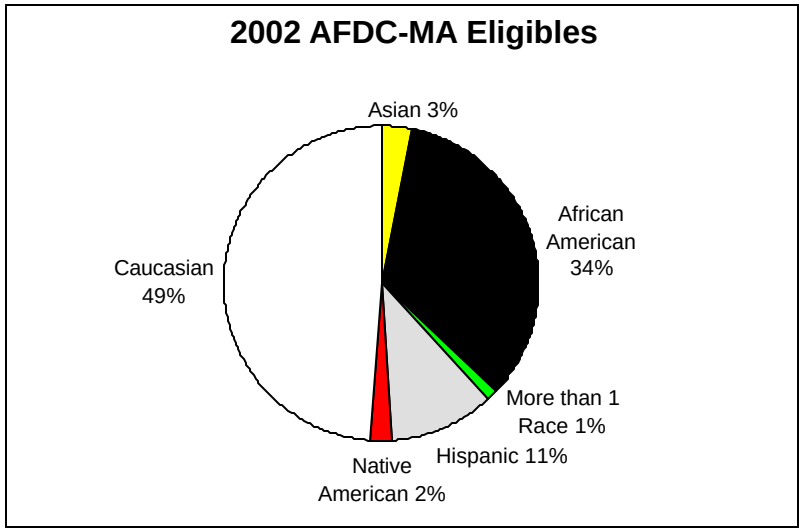
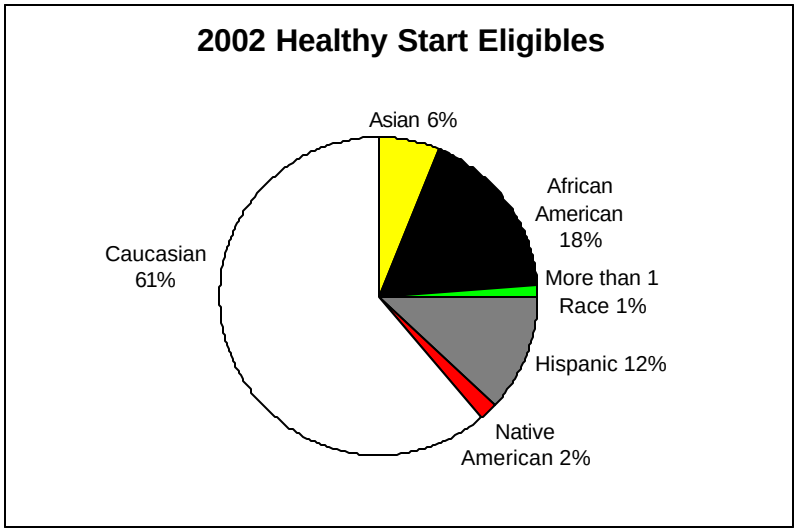


Figure 5
Race and Ethnicity of Family Medical Assistance 2002 Eligibles and Wisconsin's Total Population









Gender. Figures 6 and 7 below present data on the gender mix within the three family MA program caseloads in 2001 and 2002 as well as the gender mix of Wisconsin's population in total.

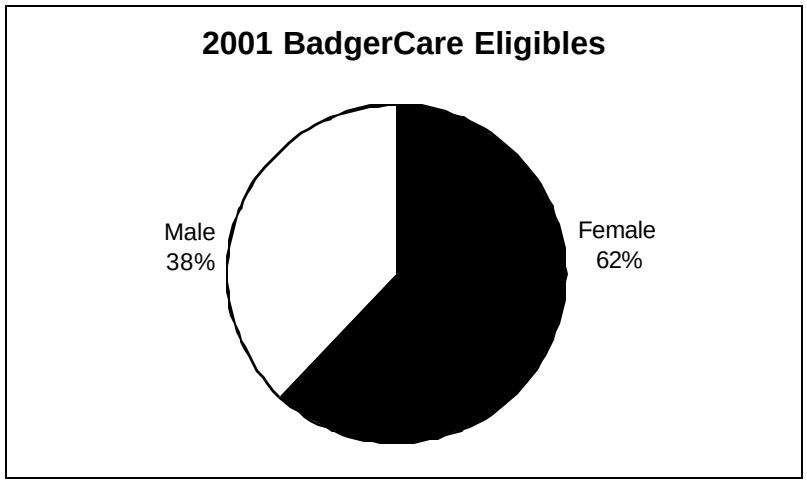
Family MA Programs. BadgerCare serves more females than males. The gender mix of the BadgerCare caseload is quite similar to that of AFDC-MA caseload, which is 62% female and 38% male. Healthy Start serves proportionately fewer females and more males than BadgerCare.[24] This is due to Healthy Start eligibility criteria. Most (91%) of the Healthy Start caseload consists of children whose gender distribution should be approximately equal. Healthy Start only covers adult females while pregnant and for two months following delivery.

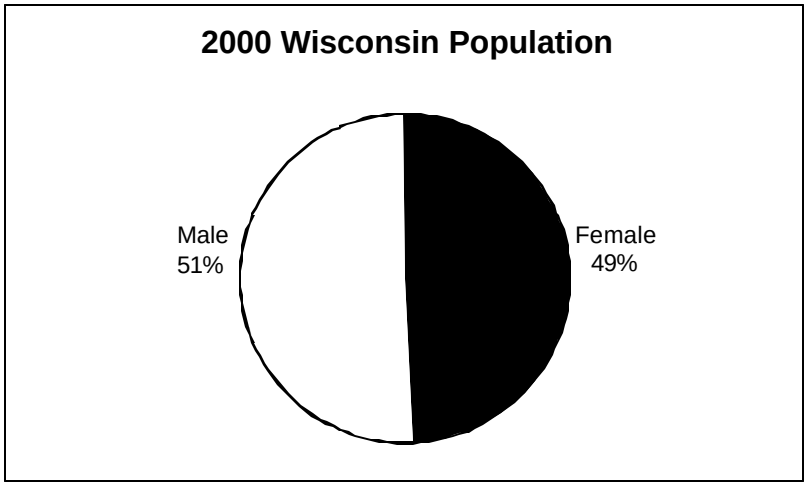
BadgerCare Compared with Wisconsin. BadgerCare serves more females than the statewide incidence. While 49% of Wisconsin residents are female, nearly two-thirds of the BadgerCare caseload is female.

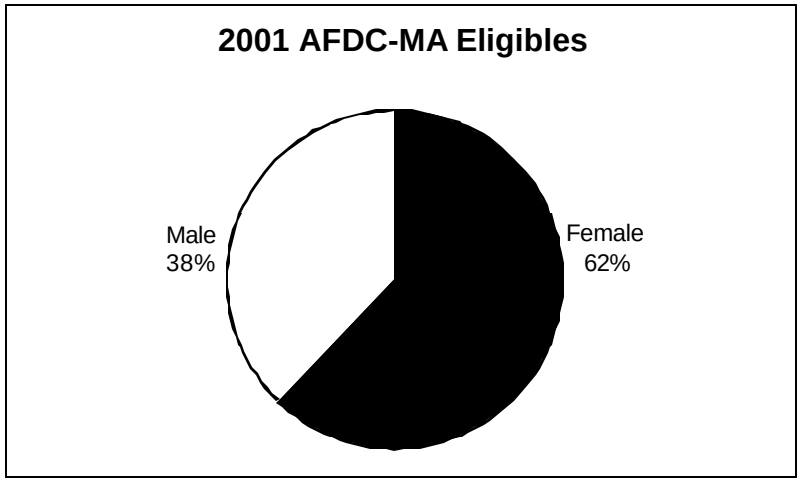
BadgerCare Trends. The gender mix of the BadgerCare caseload was similar in both 2002 and 2001. The proportion of males served by BadgerCare increased from 38% in 2001 to 40% in 2002.

[24] 62% of the 2001 BadgerCare caseload and 60% of the 2002 BadgerCare caseload was female. 55% of the 2001 Healthy Start caseload and 54% of the 2002 Healthy Start caseload was female.

Figure 6
Gender of Family Medical Assistance 2001 Eligibles and Wisconsin's Total Population







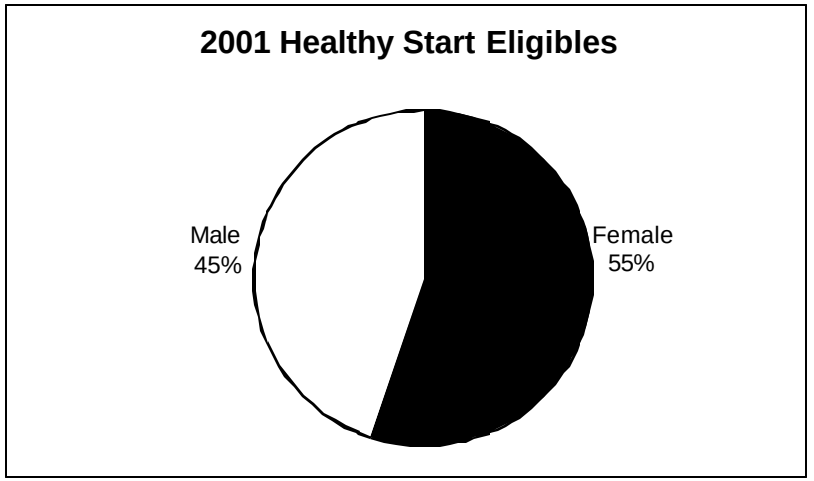
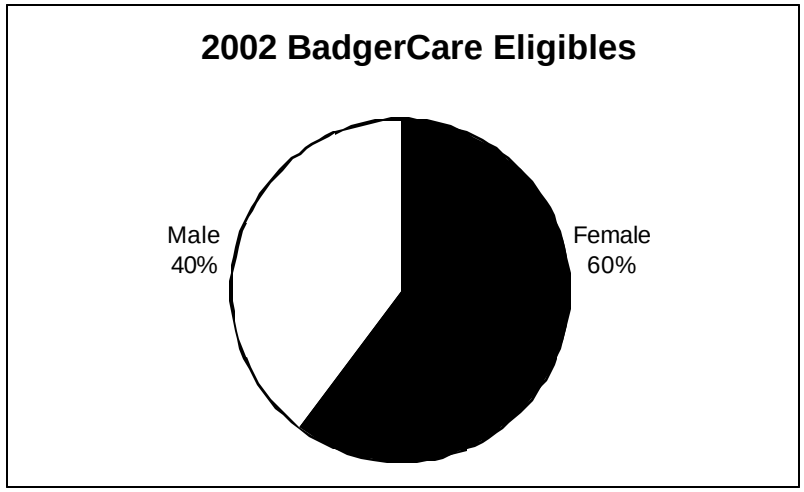
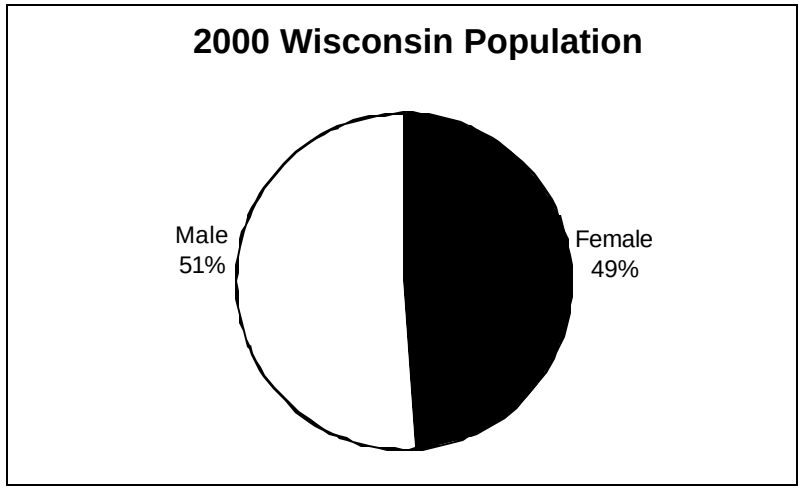
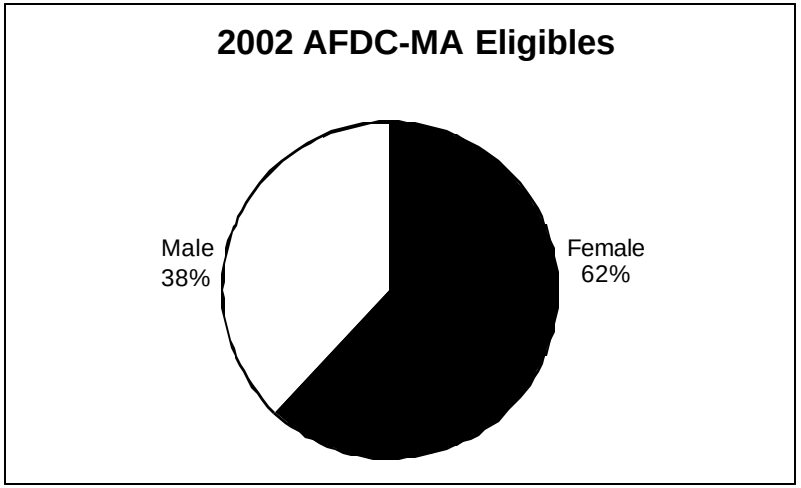
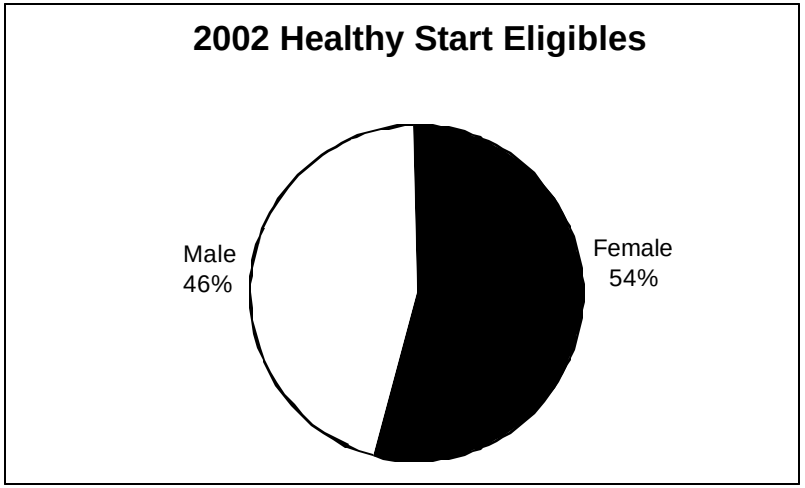


Figure 7
Gender of Family Medical Assistance 2002 Eligibles and Wisconsin's Total Population









Type of County of Residence. Figures 8 and 9 below present data on the urban/rural mix within the three family MA program caseloads in 2001 and 2002 as well as the urban/rural mix of Wisconsin's population in total.

Family MA Programs. BadgerCare expands publicly financed health care to people living in rural counties. The proportion of the BadgerCare caseload living in rural counties is higher than in the other family MA programs. About one-fourth of the BadgerCare caseload lives in a rural county. In comparison, about one-fifth of the Healthy Start caseload and about one-seventh of the AFDC-MA caseload live in a rural county.

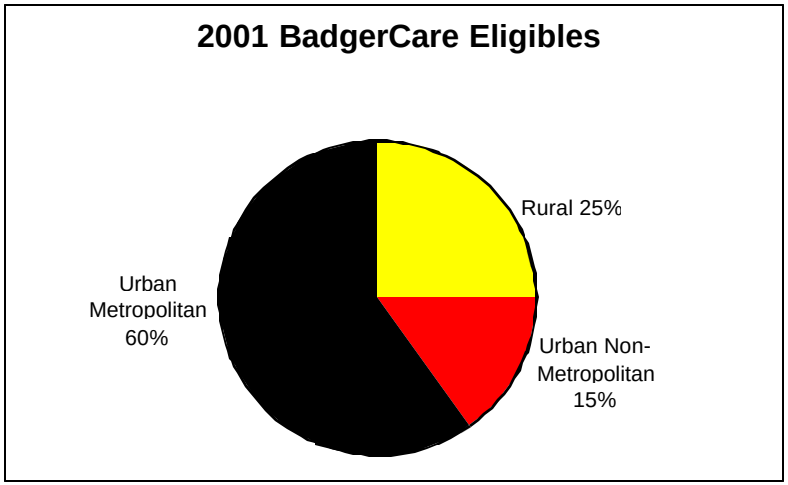
The majority (about three-fifths) of BadgerCare clients live in urban metropolitan counties. About two-thirds of the Healthy Start caseload and about three fourths of the AFDC-MA caseload live in urban metropolitan counties. Identical proportions of BadgerCare and Healthy Start clients live in urban non-metropolitan counties (15%). About one-tenth of the AFDC-MA caseload lives in urban non-metropolitan counties.

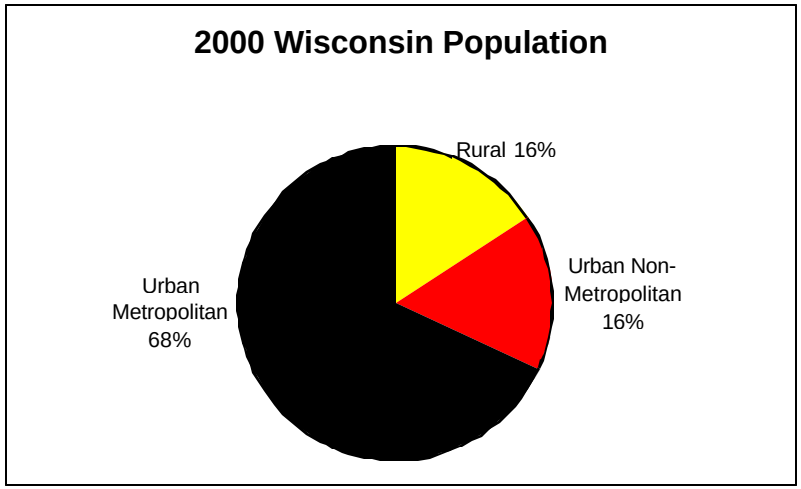
BadgerCare Compared with Wisconsin. Proportionately more BadgerCare clients live in rural counties than the statewide population incidence. About one-fourth of the BadgerCare caseload lives in a rural county as compared with 16% of Wisconsin's population. A somewhat smaller proportion of BadgerCare clients live in urban metropolitan counties than the statewide population incidence of 68%. A similar percentage of BadgerCare clients (15%) live in urban non-metropolitan counties as the statewide population incidence (16%).

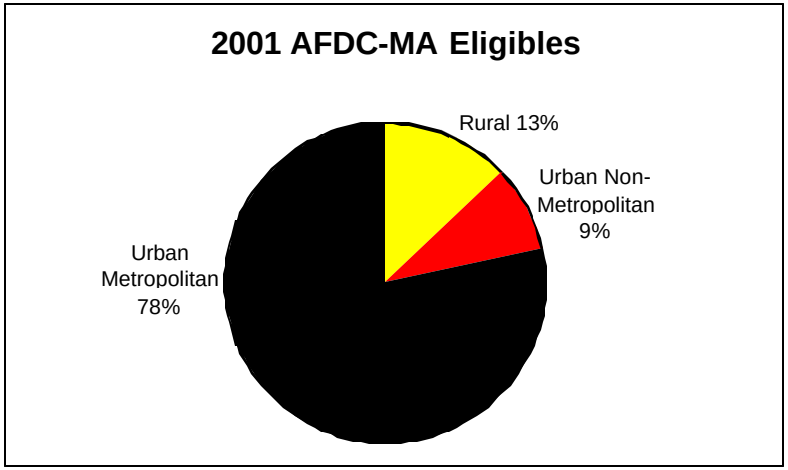
BadgerCare Trends. The urban/rural mix of the BadgerCare caseload was similar in 2002 and 2001. The proportion of the BadgerCare caseload living in rural counties decreased slightly from 25% in 2001 to 24% in 2002, and the proportion of the BadgerCare caseload living in urban metropolitan counties increased slightly from 60% in 2001 to 61% in 2002. The proportion of the BadgerCare caseload living in urban non-metropolitan counties remained constant at 15%.

Figure 8

Type of County of Residence Among Family Medical Assistance 2001 Eligibles and Wisconsin's Total Population







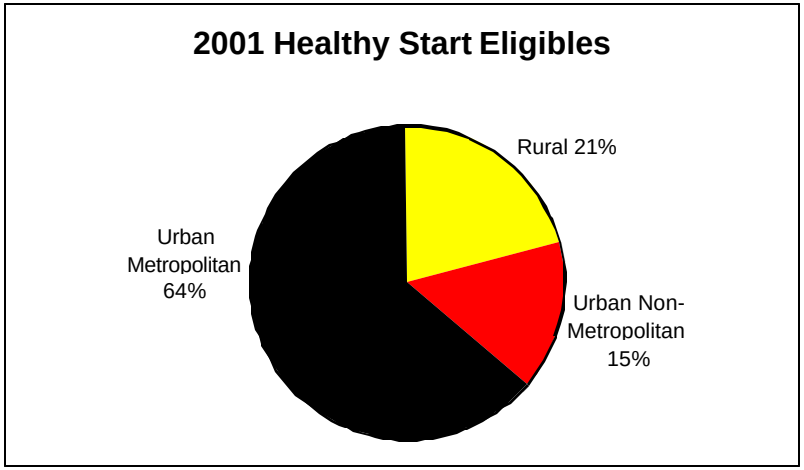
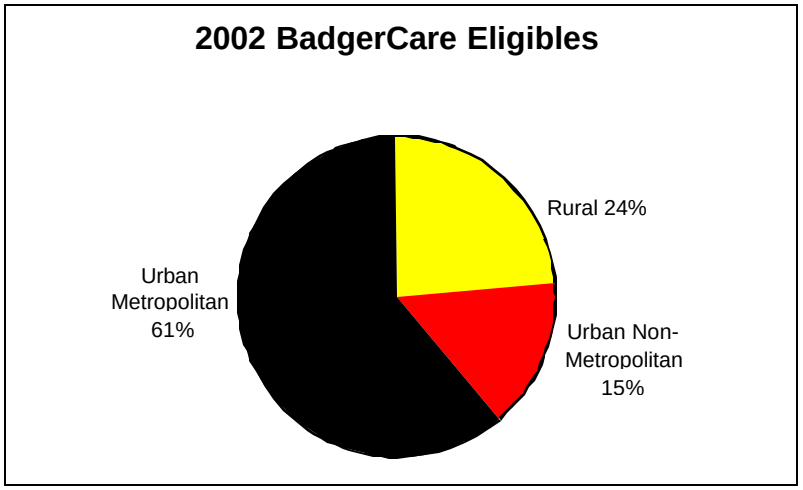
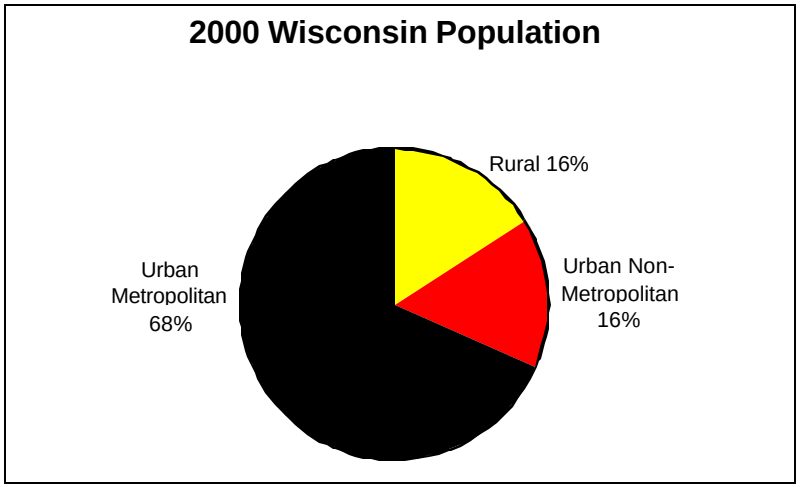
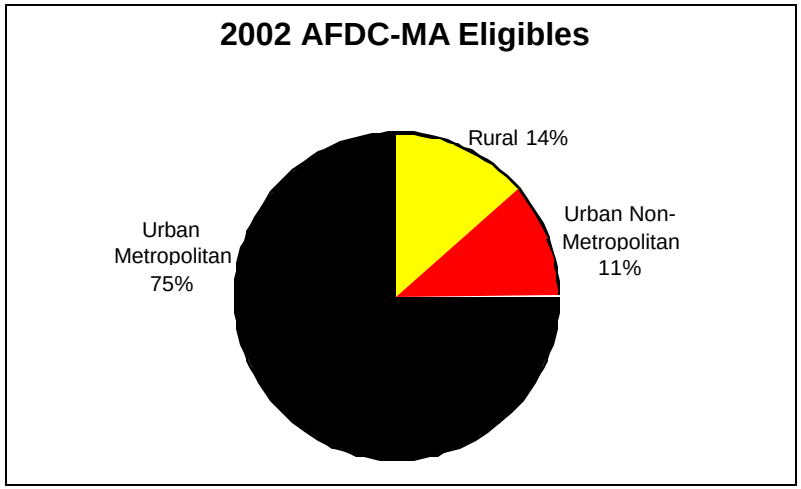


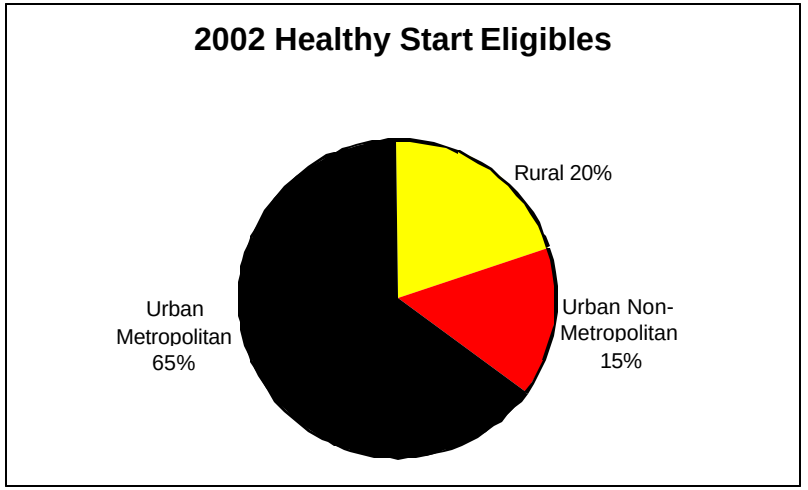
Figure 9

Type of County of Residence Among Family Medical Asistance 2002 Eligibles and Wisconsin's Total Population









Comparison of Four Groups. This section compares the demographic characteristics of the four groups analyzed above to determine if BadgerCare is more similar demographically to the general population than to family Medicaid, a performance goal of the program related to expanding health coverage and reducing the number of uninsured children.[25]

BadgerCare enrollees were more like the general state population than family Medicaid in some respects, but more like Medicaid in other respects. See Table 5 below. BadgerCare had about the same proportion of adults (64 percent) as the general population (56 percent), while Healthy Start and AFDC Medicaid had higher proportions of children, 91 percent and 65 percent respectively.

BadgerCare fell between the general population and family Medicaid in terms of minority participation; the lowest percentage of minorities was observed in the general population (13 percent) and the next lowest in BadgerCare (29 percent) and Healthy Start (39 percent). The highest proportion of minorities (51 percent) was in AFDC Medicaid.

BadgerCare was more like AFDC Medicaid in that both served a higher proportion of females (60 and 62 percent respectively) than found in the general population (49 percent). Healthy Start (54 percent) was closer to the general population than was BadgerCare.

Table 5
Comparison of Four Groups Demographics

Factor	AFDC Medicaid	Healthy Start	BadgerCare	Wisconsin Population
Adults 19-59	35%	9%	64%	56%
Children 0-18	65%	91%	36%	44%
Caucasian	49%	61%	71%	87%
African American	34%	18%	16%	6%
Hispanic	11%	12%	8%	3%
Asian	3%	6%	3%	2%
Native American	2%	2%	2%	1%
More than One Race/Group	1%	1%		1%
Subtotal: All Minorities	**51%**	**39%**	**29%**	**13%**
Female	62%	54%	60%	49%
Reside rural	14%	20%	24%	16%
Reside urban-non-Metropolitan	11%	15%	15%	16%
Reside urban-Metropolitan	75%	65%	61%	68%

[25] Annual Report of the State Children's Health Insurance Plans Under Title XXI of the Social Security Act, Federal Fiscal Year 2003, Division of Health Care Financing.

BadgerCare was least like the general population in terms of the urban-rural dimension. It had the highest proportion of enrollees in rural counties (24 percent), followed by Healthy Start (20 percent). AFDC Medicaid enrollees were the least likely to reside in urban areas (14 percent), slightly lower than the population as a whole (16 percent).

Objective Five: Compare and contrast BadgerCare participants, Medicaid recipients, and the Wisconsin population as a whole using selected measures of medical service utilization, for example, well baby exams, mammograms, treatment in a primary care clinic, etc.

In the following section, BadgerCare clients' use of health care services is compared with that of other family Medicaid clients and that of the total Wisconsin population. The BadgerCare caseload consisted of persons who were eligible to receive Medicaid services under the BadgerCare program during CY 2002. This included both persons enrolled during January 2002, as well as continuing eligibles that were enrolled in a prior year and remained eligible for BadgerCare throughout the year. We also compare service use among other similar family Medicaid eligibility groups who were eligible to receive Medicaid services through HMOs during CY 2002. These family Medicaid eligibility groups included clients who were on the Healthy Start caseload and clients in the AFDC Medicaid eligibility categories[26]. In addition, we analyzed medical service use among Wisconsin residents using readily available data. Wisconsin residents' use of medical services was compared with that of BadgerCare clients.

Services included in the analysis are preventive dental services, physician outpatient visits, emergency room use, lead screening, Pap tests and mammograms. Information on selected other specialty care services, HealthCheck exams and well child exams is also presented for BadgerCare and other family Medicaid clients. It was necessary to use a variety of information sources to obtain data on the use of these services by BadgerCare clients, other family Medicaid clients and the total Wisconsin population. Because the sources of information varied, this report provides a general characterization of the differences in service utilization among the three groups. And because it was necessary to use slightly different approaches to collect information on BadgerCare FFS and BadgerCare managed care clients' use of services, the information presented in this report also only provides a general estimate of service use within the BadgerCare population.

In general, BadgerCare clients had higher or similar rates of medical service utilization as compared with other family Medicaid clients, but lower medical service utilization as compared with the overall Wisconsin population. In comparison to the overall Wisconsin population, BadgerCare clients were more likely to receive lead toxicity screening, but they were less likely to receive dental care, ambulatory outpatient care, Pap tests and mammograms. BadgerCare clients had similar emergency room use rates as compared with the overall Wisconsin population. In comparison to other family Medicaid clients, BadgerCare clients were more likely to receive preventive dental care, well-child care, HealthCheck exams and mammograms, but

[26] This included "AFDC" and "AFDC-Related" MA recipients. These were people in families with dependent children who are eligible for MA due to their meeting income and/or other categorical requirements for AFDC that were in effect on July 16, 1996.

less likely to receive Pap tests and to use an emergency room for health care. BadgerCare clients' utilization of other services was similar to that of other family Medicaid clients.

The BadgerCare HMO population is older and has a higher proportion of males than the family HMO population. FFS BadgerCare has more rural enrollees than HMO BadgerCare. These population differences should be considered when interpreting the meaning of reported differences in service use.

Data Sources

BadgerCare and Family Medicaid Clients

Three primary data sources were used for the analysis of medical service utilization by BadgerCare and other Family clients. These included:

- The Medicaid Management Information System (MMIS) data warehouse which provided information on BadgerCare clients served on a Fee-For-Service basis;
- The MEDDIC-MS Data Book[27] which provided summary information on BadgerCare HMO and other family Medicaid clients served through managed care organizations. This summary information also was based on data obtained from the MMIS data warehouse.
- A recent report[28] by the Wisconsin Legislative Audit Bureau (LAB) which provided summary information on the use of emergency room services by Medicaid clients.

This report also briefly summarizes findings related to self-reported service use included in the Research Triangle Institute's evaluation of BadgerCare.

Following is a description of the various data sources used in the analysis.

MMIS Fee-For-Service Data. Special analyses were done to describe BadgerCare Fee-For Service clients' use of services during the time period analyzed.[29] These special analyses used information from the MMIS data warehouse, the same source of information used to prepare the MEDDIC-MS Data Book that provided summary information on managed care clients use of services. We analyzed information in the MMIS data warehouse to describe the utilization of preventive dental services and physician outpatient visits among BadgerCare FFS clients. These are key, basic services that one would expect most people to access during a year. The selection

[27] MEDDIC-MS Data Book (Medicaid Encounter Data Driven Improvement Core Measure Set), Volume 2. 2002 HMO Performance Data, Medicaid Program Data and BadgerCare Program Data Compared, State of Wisconsin, DHFS, DHCF, Bureau of Managed Care Programs, February 2004.

[28] Use of Emergency Department Services By Medical Assistance Recipients, Legislative Audit Bureau, January 2004.

[29] Monthly counts of clients during CY 2002 show 28% of BadgerCare clients using medical services on a Fee-For-Service (FFS) basis, and analysis of enrollment episodes summarized in the final RTI evaluation of BadgerCare showed 25.9% to be exclusively Fee-For-Service (Table 2-13). The earlier RTI case study report on BadgerCare found that 24.1% of the BadgerCare enrollees in 2000 were exclusively Fee-For-Service clients (Exhibit 15). Summary information on service utilization for BadgerCare HMO clients and other Family MA clients was available from the MEDIC-MS Data Book, but no summary information was available for the BadgerCare clients who were served on a Fee-For-Service basis.

of these services was also based on the availability of statewide data, the size of the BadgerCare FFS population that might access services, and the comparability of data across the three groups. We mirrored the analysis done by APS for the MEDDIC-MS report by using identical claims codes as were included in the specifications from the MEDDIC-MS report. These analyses were done because BadgerCare fee-for service clients represent a significant segment of the BadgerCare population and no summary information was available on their use of services.

The Recipient Analysis Universe of the Medicaid Evaluation Decision Support (MEDS) system was used to identify all Medicaid recipients who were continuously eligible for BadgerCare and also served through the FFS system during all of CY 2002. The MEDS Claims analysis universe was queried to extract data on paid claims for preventive dental care and physician outpatient visits that were provided to this continuously eligible FFS BadgerCare client cohort during CY 2002. There were 8,308 people who met these medical status group and continuous eligibility criteria. In addition, there were 12,303 BadgerCare clients age 3 and over who met these continuous eligibility criteria, but were enrolled in HMOs that do not include dental care in their service package. We also extracted data on paid claims for their preventive dental care.

For FFS BadgerCare clients, the analysis consistently evaluated whether services were provided during CY 2002. All cases in the BadgerCare FFS study cohort were continuously eligible for Medicaid during 2002 and their complete records of Medicaid paid claims for the selected medical services were reviewed. For BadgerCare clients who received services on a FFS basis, the "look-back period" is consistently defined to be all 365 days of CY 2002.[30]

MEDDIC-MS Report. The Department's Division of Health Care Financing (DHCF) contracted with APS for an extensive analysis of medical service use during CY 2002 among BadgerCare and selected other Medicaid clients who were served by managed care agencies. The APS analysis was used by DHCF staff to produce the MEDDIC-MS Data Book,[31] a report that presents comparative service use data on BadgerCare and other family Medicaid clients served by managed care agencies. This data was also used by DHCF for the SCHIP Annual Report. The MEDDIC-MS report was used for most data on service utilization among Medicaid managed care clients. The MEDDIC-MS Data Book is published at the Department's web site at **http://dhfs.wisconsin.gov/medicaid7/pdfs/vol2.pdf**

The MEDDIC-MS report uses somewhat different criteria in evaluating the provision of health care services than we used in the analysis of FFS data from the MMIS. The MEDDIC-MS uses a variable length of time to define eligibility, whereas the FFS analysis was based on a consistent one-year eligibility period. To be included in the analysis, a FFS client had to be continuously

[30] It should be noted that because it only includes persons who were served on a FFS basis for a 12-month period, the FFS analysis does not reflect the experience of BadgerCare clients who were served temporarily on a FFS basis before enrolling in an HMO or of those who were on a FFS basis for less than a year. The analysis of BadgerCare FFS clients' service use was limited to clients who were served through the FFS system for a 12-month period to replicate as closely as possible the approach used for the analysis in the HMO MEDDIC-MS Report. That report used a 10-12 month follow-up period.

[31] MEDDIC-MS Data Book (Medicaid Encounter Data Driven Improvement Core Measure Set, Volume 2. 2002 HMO Performance Data Medicaid Program Data and BadgerCare Program Data Compared, State of Wisconsin, DHFS, DHCF, Bureau of Managed Care Programs, February 2004.

Medicaid eligible during CY 2002. But for the MEDDIC-MS report, eligibility or continuous enrollment among HMO clients was defined to include:

- Client was enrolled continuously for at least ten months (304 days) with the same HMO immediately prior to the measure end date[32];
- Client had no more than one break of up to 45 days in enrollment;
- Client must have a total of not less than 259 enrolled days in the look-back period.

DHCF decided against requiring 365 days of continuous eligibility for HMO enrollees to maximize their study population base. DHCF staff indicate that the average length of Medicaid HMO enrollment for adults has historically been between 8.5 and 10 months and this was the rationale for the MEDDIC-MS design used to select their study cohorts.

There also were differences in the "look-back" period. The FFS analysis used a standard 12-month look-back period (CY 2002). For the MEDDIC-MS report, the look-back period was defined as 12 months (365 days) from the end date for each performance measure. Encounter data on service use for individual clients was available to be summarized in the MEDDIC-MS report for the time when individual clients were actually enrolled in HMOs during this 12-month look-back period.

For the analysis of preventive dental care, in addition to using summary data from the MEDDIC-MS Report, original spreadsheets containing detailed service use statistics were obtained from the contractor. These spreadsheets were used to compute preventive dental care use utilization rates for the BadgerCare HMO and Family Medicaid HMO populations (all ages) and also for the three BadgerCare dental cohorts in the aggregate.

LAB Report on Emergency Room Use. A recent Wisconsin Legislative Audit Bureau (LAB) report[33] was used for data on the use of emergency room services by Medicaid recipients. This report provides data on emergency room service use among all clients who were eligible for Medicaid during FY 2002. This report presents information separately for BadgerCare clients.

Sources on Service Use by the Total Wisconsin Population

Information on the use of medical services by the total Wisconsin population was obtained from a variety of sources. These included:

- The 2001 Wisconsin Family Health Survey,[34] an ongoing DHFS annual survey of health status and health care use among Wisconsin residents,
- The Behavioral Risk Surveillance System,[35] an ongoing annual CDC sponsored national survey of health related behaviors broken out by state, and

[32] For managed care clients, the "measure end date" is the last date by which measured services can be rendered to be included in the measure numerator. This is the date from which the look-back period begins.
[33] Use of Emergency Department Services By Medical Assistance Recipients, Legislative Audit Bureau, January 2004.
[34] Wisconsin Department of Health and Family Services, Division of Health Care Financing, Bureau of Health Information. Wisconsin Family Health Survey, 2001 (PHC 5356). March 2003.

- The Wisconsin Lead Poisoning Prevention Program's Annual Report.[36]

Data on statewide service use varies in comprehensiveness and comparability to the data that are available on BadgerCare and other family Medicaid clients. Self-reported survey data have less precision than claims and encounter data. Therefore, while we cannot compare values exactly, these data sources do provide a valid indicator of service utilization levels that can be used to assess differences between Medicaid recipients and the general population of Wisconsin. The report notes instances in which the approaches used limit the ability to compare BadgerCare clients' service use to that of the Family Medicaid or to the overall Wisconsin population.

Findings

Following is a description of our findings comparing health service use of BadgerCare clients to that of family Medicaid clients and the Wisconsin population. The description is presented in four main sections. These address 1) preventive dental care, 2) physician outpatient visits, 3) emergency room use, 4) other medical services included in the MEDDIC-MS Book, and 5) services analyzed in the RTI Evaluation. These sections include the following comparisons:

- BadgerCare HMO and FFS clients are compared to family Medicaid HMO clients (based on data from the MEDDIC-MS report for HMO clients and from MMIS for BadgerCare FFS clients) and to the Wisconsin population (based on data from Family Health Survey and from LAB analysis of ER use) in 3 medical service utilization areas:

1. Preventive dental care
2. Physician outpatient visits
3. Emergency room use

- BadgerCare HMO clients are compared to family Medicaid HMO clients (based on data from MEDDIC-MS Report) and to the Wisconsin population (based on data from the CDC Behavioral Risk Factor Surveillance System) in 9 medical service utilization areas:

1. Children lead toxicity screening
2. Children Health Check exams
3. Children non-health check well-child care
4. Adults mammograms
5. Adults pap tests
6. Adults and children emergency room use w/o hospital admission
7. Adults and children vision care
8. Adults and children audiology services
9. Adults and children dental care, general

- BadgerCare clients are compared to insured and to uninsured persons (from the RTI Evaluation of Badger Care based on self-reported survey) in 4 medical service utilization areas:

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[35] Behavioral Risk Factor Surveillance System, Wisconsin 2002 Prevalence Data, National Center for Chronic Disease Prevention and Health Promotion.

[36] 2002 Annual Data Report for the Wisconsin Childhood Lead Poisoning Prevention Program, DHFS Bureau of Environmental Health, Division of Public Health.

1. Physician visits
2. Dental visits
3. Emergency room visits
4. Well Child visits

Preventive Dental Care

Preventive dental services include initial and comprehensive dental examinations, prophylaxis (i.e., teeth cleaning), topical application of fluoride and application of sealants. The provision of regular dental care can prevent the development of dental cavities, tooth loss, oral infections and other health problems. An individual who received both a dental exam and a prophylaxis during the look-back period is considered to have met the preventive dental care performance level included in the MEDDIC-MS technical specifications.

There were three BadgerCare cohorts included in the analysis of preventive dental care. These were:

- BadgerCare FFS clients who received all dental and other health care on a FFS basis. This cohort included 8,304 clients.[37] Most (75.4%) BadgerCare FFS clients were adults age 21 and over.
- BadgerCare clients who were enrolled in HMOs that did not include dental care in their service package. This cohort included 12,303 clients. In CY 2002, ten of the 13 HMOs participating in Medicaid and BadgerCare did not include dental services in their care package. Clients enrolled in these HMOs received their dental care on a FFS basis. Most (71.9%) of these clients were adults age 21 and over.
- BadgerCare clients who were enrolled in HMOs that included both health and dental care in their service package. This cohort included 19,727 clients. In CY 2002, three of the 13 HMOs participating in Medicaid and BadgerCare offered dental services. These HMOs are primarily in the Milwaukee area. Most (80.8%) of these BadgerCare managed care clients were adults age 21 and over.

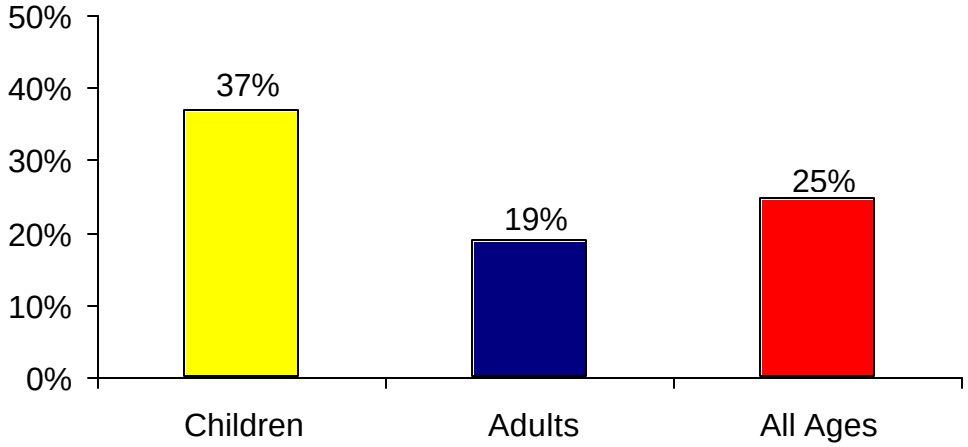
There was one Family Medicaid cohort for the preventive dental care service analysis. These clients were all enrolled in one of the three HMOs that provided dental care as part of their service package. The Family Medicaid dental cohort included 86,169 clients who were in the Healthy Start or AFDC-MA Medicaid eligibility groups. While most clients in the BadgerCare dental cohorts were adults, most (76.0%) Family Medicaid managed care clients were children.

Preventive Dental Service Use Among BadgerCare Clients. Among the 40,338 clients included in the three BadgerCare cohorts, 10,777 (25.0%) received both an oral exam and a prophylaxis during CY 2002, indicating that they met the preventive dental care performance level included in the MEDDIC-MS technical specifications. BadgerCare children had higher rates of preventive health care service utilization than did BadgerCare adults. Among BadgerCare children, 37.4% received both an oral exam and a prophylaxis during CY 2002. In

[37] BadgerCare FFS children under age 3 were excluded from this analysis to be consistent with selection criteria used in the MEDDIC-MS report.

comparison, among BadgerCare adults, 18.9% received both an oral exam and a prophylaxis during CY 2002.

Figure 10
Preventive Dental Care Provided to All BadgerCare Clients



Preventive Dental Service Use Among Other Family Medicaid Clients. A slightly greater proportion of BadgerCare clients received preventive dental care services than did family Medicaid HMO clients (25% and 23%, respectively).

Overall, 24.3% of the BadgerCare managed care clients whose HMO included dental care had received both an oral exam and a prophylaxis during CY 2002. A slightly higher proportion (26.3%) of the BadgerCare HMO/FFS Dental study cohort received both an oral exam and a prophylaxis during CY 2002. A similar proportion (24.6%) of BadgerCare clients served through the FFS system received both an oral exam and a prophylaxis during CY 2002. In comparison, a somewhat lower proportion (23.0%) of Family Medicaid managed care clients received complete preventive dental services during CY 2002.

BadgerCare Compared with Wisconsin. The general population of Wisconsin was more likely to receive dental care than were BadgerCare clients. The 2001 Wisconsin Family Health Survey[38] estimated that 74% of Wisconsin residents of all ages visited a dentist during the past year. This would include visits to receive preventive as well as restorative dental care. In comparison, we estimate that about one-third of BadgerCare clients of all ages visited a dentist in 2002. This estimate is based on the number of BadgerCare clients who received comprehensive preventive dental care or general dental services.

[38] Wisconsin Department of Health and Family Services, Division of Health Care Financing, Bureau of Health Information. Wisconsin Family Health Survey, 2001 (PHC 5356). March 2003.

One-fourth (25.0%) of BadgerCare clients received comprehensive preventive dental care (including both an oral exam and a prophylaxis, as defined in the MEDDIC-MS technical specifications), during CY 2002. Relatively few (1.7%) BadgerCare clients served through HMOs received general dental services in addition to preventive dental care services. If this dental care utilization level is consistent across the BadgerCare caseload, and one assumed that 1.7% of all BadgerCare clients received general dental services and did not also receive preventive dental care, one would estimate that about one-third[39] of BadgerCare clients of all ages visited a dentist in 2002.

The 2001 Wisconsin Family Health Survey estimated that 86% of Wisconsin children age 3 to 17 had visited a dentist during the past year. In comparison, among all BadgerCare children, 37.4% received both an oral exam and a prophylaxis during CY 2002.[40] The 2001 Wisconsin Family Health Survey estimated that 72% of Wisconsin adults age 18 to 64 had visited a dentist during the past year. In comparison, less than one-fifth (18.9%) of BadgerCare adults received both an oral exam and a prophylaxis during CY 2002.[41]

It should be reiterated that statewide dental utilization data estimates are based on self-reported data, whereas BadgerCare data were derived from claims/encounter data which is a more precise data source. However, these differences in utilization rates are considerable and it is unlikely that they are due to methodological differences alone. The primary reason for the disparity in access to dental care among BadgerCare clients is the shortage of dentists that are willing to provide services to Medicaid recipients. Only 40% of Wisconsin dentists are willing to participate in Medicaid and even these dentists limit their Medicaid caseload. One apparent reason why dentists are reluctant to participate in Medicaid is the reported low Medicaid reimbursement rates that pay only about 48% of billed charges.[42]

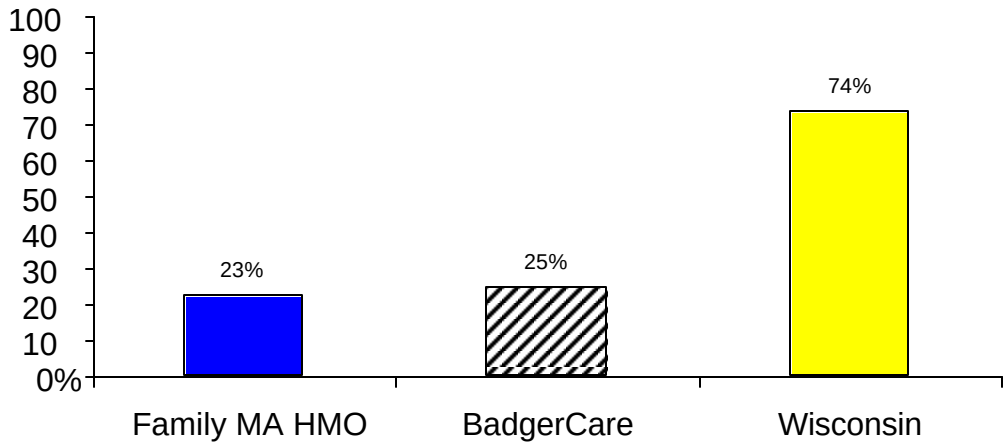
[39] Among the 2 BadgerCare cohorts that OSF analyzed, 30.8% of the FFS cohort and 32.6% of the FFS/HMO cohort received any preventive dental services. If 1.7% of each of these groups also received general dental care, it would be estimated that 32.5% of the FFS cohort and 34.3% of the FFS/HMO cohort visited a dentist in CY 2002. Among the BadgerCare HMO cohort who received dental care via their HMO, 24.3% received both an oral exam and a prophylaxis. No data were available on the percentage of these HMO clients who received some preventive dental care, but did not receive both an oral exam and a prophylaxis.

[40] Among all 3 BadgerCare cohorts, 37.4% had received services that met the preventive dental care performance level included in the MEDDIC-MS technical specifications. Rates varied based on the client's dental care delivery system. 38.5% of FFS children, 43.7% of HMO/FFS Dental children and 34.3% of HMO children whose dental care was included in their HMO care package, received both an oral exam and a prophylaxis during CY 2002.

[41] Among all 3 BadgerCare cohorts, 18.9% had received services that met the preventive dental care standard. Rates varied based on the client's dental care delivery system. 26.8% of FFS adults, 19.5% of HMO/FFS Dental adults and 17.9% of HMO adults whose dental care was included in their HMO care package, received both an oral exam and a prophylaxis during CY 2002.

[42] Robert Dwyer, Wisconsin MA Program, Chief Medical Officer, "Why Medicaid Patients Can't Get Dental Care," Wisconsin State Journal, June 19, 2004.

Figure 11
Preventive Dental Care Provided to Family MA HMO Clients, BadgerCare Clients and Wisconsin Residents



Physician Outpatient Visits

Physician outpatient visits include ambulatory visits to a physician's office to receive routine illness care, preventive medical counseling/care or risk factor reduction intervention. Thirty-five different billing codes for ambulatory physician's office visits were used to capture claims data for claims submitted by providers for these outpatient visits. These service claims included outpatient visits of varying complexity and duration, ranging from "minimal presenting problem (5 minutes)" to "comprehensive medical history/exam, medical decision - highly complex (60 minutes)." Distinctions between the nature of these outpatient visits were not controlled for in this analysis. The analysis of service use among the FFS population used the exact same billing codes as were used in the analysis of data on ambulatory visits to a physician's office among the HMO population.

Outpatient Visit Cohorts. The population base for the outpatient visit utilization analysis included 8,308 BadgerCare FFS clients, 53,044 BadgerCare managed care clients and 185,325 managed care family Medicaid clients. Most (75.4%) FFS BadgerCare clients were adults[43] and most (62.1%) BadgerCare managed care clients were adults age 21 and over. In comparison, most (80.2%) family Medicaid managed care clients were children.

Physician Outpatient Service Use Among BadgerCare Clients. Our analysis of MMIS data showed that, overall, 79.2% of the BadgerCare FFS study cohort visited a physician's office to receive outpatient care in CY 2002. On average, BadgerCare FFS clients visited a physician's office 6.1 times to receive outpatient care. About one-fifth (18.1%) had only one outpatient visit. The vast majority (88.9%) had 12 or fewer outpatient visits. Only six people had more than 100 outpatient visits.

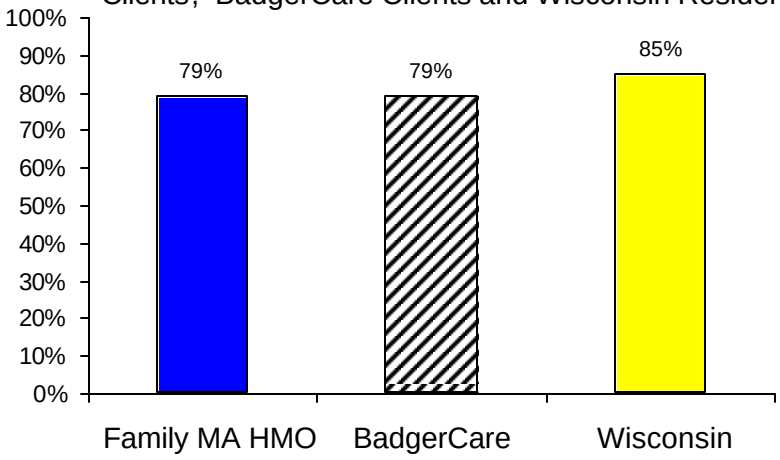
[43] Age groups among the BadgerCare FFS continuous eligibles were N= 4 under age 3, N= 2,040 age 3-20 and N= 6,264 age 21 and older.

Data from the MEDDIC-MS Report for CY 2002 shows that 79.3% of the BadgerCare managed care client cohort visited a physician's office to receive outpatient care in CY 2002.

BadgerCare Compared with Family Medicaid Clients. Physician outpatient visit utilization rates were almost identical among BadgerCare and other family Medicaid managed care clients. Nearly 80% of the eligibles in each group visited a physician's office to receive outpatient care in CY 2002.[44]

BadgerCare Compared with Wisconsin. The general population of Wisconsin was slightly more likely to have seen a physician in the past year than were BadgerCare clients. Based on self-reported data, the 2001 Wisconsin Family Health Survey[45] estimated that 85% of Wisconsin residents saw a physician in the past year. In comparison, Medicaid claims/encounter data concluded that 79.3% of BadgerCare clients visited a physician's office to receive outpatient care in CY 2002.

Figure 12
Physician Outpatient Visits Among Family MA HMO Clients, BadgerCare Clients and Wisconsin Residents



[44] 79.3% of BadgerCare clients and 79.4% of family MA managed care clients visited a physician's office to receive outpatient care in CY 2002.
[45] Wisconsin Department of Health and Family Services, Division of Health Care Financing, Bureau of Health Information. Wisconsin Family Health Survey, 2001 (PHC 5356). March 2003.

Emergency Room Use

Two different indicators are used to present data on the use of emergency rooms. The first indicator that is presented is data on any emergency room use. These data on any emergency room use among BadgerCare clients are from a recent LAB report,[46] which presents data on all visits, including those that resulted in an inpatient admission. In addition, more detailed data that is not in the LAB report was requested from LAB staff and DHFS staff in the Division of Health Care Financing's Bureau of Health Care Systems and Operations to enable emergency room use rates to be calculated for family Medicaid clients.[47] The LAB emergency room use report was used for information on any emergency room use among BadgerCare and family Medicaid clients who were served through either HMOs or the FFS system. Statewide data on any emergency room use is taken from The 2001 Wisconsin Family Health Survey.

The second indicator that is presented is data on emergency room use that does not result in an inpatient admission. The MEDDIC-MS 2002 Data Book was used for information on emergency room outpatient care use among BadgerCare and family Medicaid clients who were served through HMOs. No specific data are available on outpatient emergency room use among the general population of Wisconsin. Statewide data that are available include any type of emergency room use, including visits that resulted in an inpatient admission.

Any Emergency Room Use. BadgerCare clients had lower rates of overall emergency room use than did other family Medicaid clients. It was found that 17.3% of BadgerCare clients visited an emergency room to receive care in FY 2002. In comparison, 21.4% of family Medicaid clients from the Healthy Start and AFDC-MA caseloads used the emergency room in FY 2002.

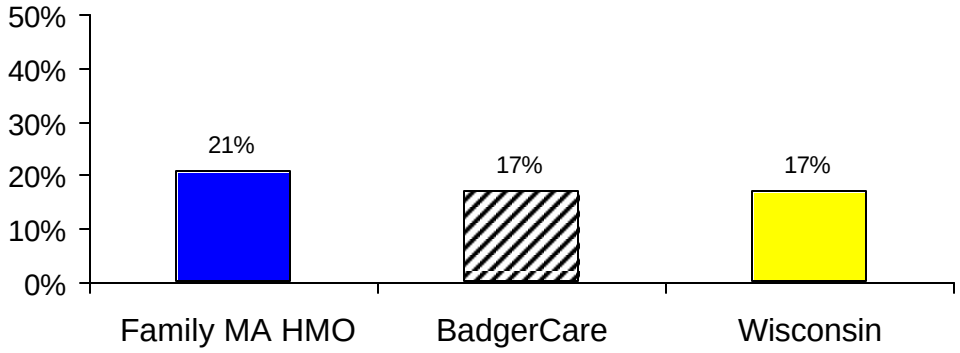
BadgerCare clients had rates of any emergency room use similar to the general population of Wisconsin. Among all BadgerCare clients, 17.3% visited an emergency room during FY 2002. The 2001 Wisconsin Family Health Survey[48] estimated that 17% of Wisconsin residents had visited an emergency room during the past year.

[46] Use of Emergency Department Services by Medical Assistance Recipients, Legislative Audit Bureau, January 2004.

[47] The LAB report presents ER data on an eligibility category called "Family and Other Types of MA." This eligibility group includes the two MA eligibility groups that we refer to in this report as "Family MA" (i.e., Healthy Start and AFDC-MA) and also includes 12 other less BadgerCare comparable MA eligibility groups such as nursing home residents, waiver clients, foster care clients, subsidized adoptions, Medicare beneficiaries, etc. OSF worked with LAB and DHCF staff to subset LAB data in order to extract data on Family MA clients and identify ER utilization patterns among only this group of BadgerCare comparable MA recipients.

[48] Wisconsin Department of Health and Family Services, Division of Health Care Financing, Bureau of Health Information. Wisconsin Family Health Survey, 2001 (PHC 5356). March 2003.

Figure 13
Emergency Room Use Among Family MA HMO Clients,
BadgerCare Clients and Wisconsin Residents



Emergency Room Outpatient Care Use. Among the managed care caseload, BadgerCare clients were less likely to have visited an emergency room for outpatient care than were Family Medicaid clients. Just 29.7% of BadgerCare clients compared to 36.9% of Family Medicaid clients visited an emergency room to receive outpatient care during 2002.

Other Medical Service Utilization Outcomes From the MEDDIC-MS Report

Table 8 below summarizes medical service utilization data from the MEDDIC-MS Report.[49] The MEDDIC-MS Report presents data on several medical service utilization outcomes among Medicaid clients whose health care is provided via the managed care system. The MEDDIC-MS Report breaks out this utilization data for BadgerCare clients as well as for comparable clients in the family Medicaid eligibility groups including Healthy Start and AFDC-MA.

The MEDDIC-MS report also includes utilization data on selected Medicaid sub-populations that exhibit specific diagnoses such as diabetes and asthma, and follow-up care data on clients who had received inpatient care for mental health or substance abuse. Service utilization data on these selected Medicaid sub-populations are not presented in this report.

The MEDDIC Report shows that BadgerCare clients generally received more health care services than did Family Medicaid clients. BadgerCare clients served through HMOs were more likely to receive HealthCheck exams, well child care, mammograms and vision care then were Family Medicaid clients. BadgerCare clients were less likely to have received Pap tests and to have used an emergency room for outpatient care than were Family Medicaid clients. BadgerCare clients' utilization of other services was similar to that of Family Medicaid clients.

Health Care Provided to Children. Wisconsin requires screening for lead toxicity among all Medicaid eligible children ages 1 and 2. This age group is particularly vulnerable to the negative effects of lead poisoning on their growth and development due to activities typical to young

[49] MEDDIC-MS Data Book (Medicaid Encounter Data Driven Improvement Core Measure Set, Volume 2. 2002 HMO Performance Data, Medicaid Program Data and BadgerCare Program Data Compared, State of Wisconsin, DHFS, DHCF, Bureau of Managed Care Programs, February 2004.

children that put them at increased risk of exposure to lead poisoning. Young Medicaid children have much higher lead toxicity rates than do the general population of children ages 1 and 2.[50] Young BadgerCare children had received similar rates of blood lead toxicity screening as compared with other family Medicaid children (61% BadgerCare and 60% family MA). It should be noted that relatively few BadgerCare children (N=77) were included in this managed care cohort of children ages 1 and 2. Among all Medicaid children ages 1 and 2 that were eligible for any Medicaid program for any length of time and served through either FFS or managed care during 2002, 47.5% were screened for lead toxicity during 2002.[51] In comparison, among all Wisconsin children ages 1 and 2, about one-third (34.3%) were screened for lead toxicity during 2002.

BadgerCare children were more likely to have received non-HealthCheck well child care than were Family Medicaid children. BadgerCare children were also more likely to have received Health Check exams than were Family Medicaid children. A recent federal HHS study[52] examined a sample of Medicaid children in 10 states and found that among children age 0 to 5, only 30% of children who were enrolled in managed care during 1994 through 1995 received all prescribed HealthCheck screens and 48% had received no HealthCheck screens at all. The Federal government (HCFA) has established participation goals for HealthCheck requiring that states screen 80% of eligible children.

Preventive Health Screening Exams Provided to Adult Females. Annual mammograms are recommended for women age 40 and over. BadgerCare clients age 40 and over were more likely to have had a mammogram during the 2002 look back period than were other Family Medicaid clients. Among managed care clients age 40 and over, 37.1% of BadgerCare clients, as compared with 25.8% of Family Medicaid clients had received a mammogram. Wisconsin women statewide had higher mammogram exam rates than did BadgerCare managed care clients.[53] Among all Wisconsin women age 40 to 49, 70.9% had received a mammogram in 2002, as compared with 29.5% BadgerCare managed care clients in this age cohort. Among all Wisconsin women age 50 to 59, 73.4% had received a mammogram in 2002, as compared with 36.7% of BadgerCare managed care clients age 50 and over. Relatively few BadgerCare clients are females over age 59.

A Pap test is recommended every three years for adult women. BadgerCare clients were less likely to have had a Pap test to screen for cervical cancer during the look back period than were Family Medicaid clients. Among managed care adult clients age 18 to 65, 43.5% of BadgerCare clients, as compared with 46.1% of Family Medicaid clients had received a Pap test during the look back period. Wisconsin women statewide had higher Pap test exam rates than did

[50] 2002 Annual Data Report for the Wisconsin Childhood Lead Poisoning Prevention Program, DHFS Bureau of Environmental Health, Division of Public Health. CY 2002 testing results found that MA children ages 1 and 2 had almost triple the rate of lead toxicity as this age group of children statewide (i.e., 8% and 2.8% respectively).
[51] 2002 Annual Data Report for the Wisconsin Childhood Lead Poisoning Prevention Program, DHFS Bureau of Environmental Health, Division of Public Health.
[52] Medicaid Managed Care and EPSDT, Office of the Inspector General, HHS (OEI-05-93-00290, May 1997).
[53] Behavioral Risk Factor Surveillance System, Wisconsin 2002 Prevalence Data, National Center for Chronic Disease Prevention and Health Promotion.

BadgerCare managed care clients.[54] Among all Wisconsin adult women surveyed in 2002, 66.6% had received a Pap test in the past year, as compared with 43.5% of BadgerCare managed care clients age 18 to 65.

General and Specialty Outpatient Care Provided to Clients of Any Age. Relatively few BadgerCare or Family Medicaid clients received specialty vision care, audiology services or dental care (i.e., less than 4% of either group on any measure) during 2002. BadgerCare clients were slightly more likely to have received vision care, but slightly less likely to have received audiology services or general dental care than Family Medicaid clients.

[54] Behavioral Risk Factor Surveillance System, Wisconsin 2002 Prevalence Data, National Center for Chronic Disease Prevention and Health Promotion.

Table 6
Selected Medical Service Utilization Outcomes Among Medicaid Managed Care Clients
(Data from MEDDIC-MS Report)

Medical Service Utilization Outcome	Age Group	BadgerCare HMO Clients	Family MA HMO Clients (includes Healthy Start and AFDC-MA)
Children			
Lead Toxicity Screening	Age 1	55.0%	67.0%
	Age 2	67.6%	52.1%
	All Age 1 and 2	61.0%	60.0%
HealthCheck Exams*	Age 0 to 2	57.6%	57.7%
	Age 3 to 5	96.3%	93.8%
	Age 6 to 14	89.4%	84.5%
	Age 15 to 20	87.9%	83.2%
Non-Health Check Well-Child Care**	Under Age 1	90.9%	89%
	Age 1 to 2	89.9%	86.3%
	Age 3 to 5	82.3%	74.1%
	Age 6 to 14	70.3%	60.6%
	Age 15 to 20	73.5%	66.2%
Adults			
Mammograms	Age 40 to 49	29.5%	21.6%
	Age 50+	36.7%	29.1%
	All Age 40+	37.1%	25.8%
Pap Tests	Age 18 to 65	43.5%	46.1%
Adults and Children			
Emergency Room Use without Inpatient Admission	All Ages	29.7%	36.9%
Vision Care	All Ages	3.4%	1.8%
Audiology Services	All Ages	1.3%	1.8%
Dental Care, General	All Ages	1.7%	2.7%

*HealthCheck exams are comprehensive well child exams. Among children age 0 to 2, the data reflect the percentage that had received 7 or more HealthCheck exams. Among children over age 2, the data reflect the percentage that had received one or more HealthCheck exams.
*Non-HealthCheck well child visits are primary care visits that may be too limited in scope to qualify as Health Check visits. Data reflect the percentage of children who had received at least one visit in the look back period.

Research Triangle Institute Evaluation

An evaluation of BadgerCare by the Research Triangle Institute[55] used a client survey to compare health care service use by a sample of BadgerCare clients to that of persons with insurance and also to a sample of uninsured persons. The analysis included emergency room use, well child visits, overnight hospital stays for non-delivery and delivery related admissions and visits to nurse practitioners, physicians, dentists and mental health professionals. They found greater reported service use for BadgerCare clients than for the uninsured, but less difference compared to people with insurance. The results are summarized in Table 7 below.

Table 7
RTI Data on Medical Service Use Among BadgerCare Clients as Compared to Persons with Insurance and the Uninsured[56]

Service	Age Group	BadgerCare	Insured	Uninsured
Physician Visits	Age 0 to 5	91.5%	88.4%	58.8%
	Age 6-17	84.5%	74.4%	52.9%
	Adults	78.0%	76.1%	55.6%
Dental Visits	Age 0 to 5	64.9%	57.1%	30.6%
	Age 6-17	73.3%	77.3%	43.8%
	Adults	55.5%	56.8%	41.8%
Emergency Room Visits	Age 0 to 5	39.4%	47.7%	29.4%
	Age 6-17	29.9%	27.4%	20.3%
	Adults	40.4%	31.6%	28.9%
Well Child Visits	Age 0 to 5	82.5%	59.1%	49.0%
	Age 6-17	61.8%	43.3%	26.0%

Satisfaction of BadgerCare Enrollees

Objective Six: Determine if the price of coverage (BadgerCare premium) presents a hardship for participants, and if premiums were a factor in their decision to enroll.

Objective Seven: Determine if BadgerCare participants are satisfied with the array of health care services available to them under their coverage.

[55] Evaluation of the BadgerCare Medicaid Demonstration, Draft Final Report, Research Triangle Institute International, October 2003
[56] In all cases the statistics in this table reflect any use of the service in the past year.

Objective Eight: Determine if BadgerCare participants are satisfied or dissatisfied with waiting time for medical appointments.

Objective Nine: Determine if BadgerCare participants are satisfied or dissatisfied with their ability to secure referrals to medical specialists.

Objective Ten: Determine if BadgerCare participants believe their health has improved, stayed the same, or gotten worse since enrolling in BadgerCare.

Objective Eleven: Determine if BadgerCare participants are satisfied with the quality of care received.

In general the results show that BadgerCare recipients were satisfied with their health care insurance plan, with services received, with their physicians, and with waiting times for appointments. The majority were not adversely affected by the 3 percent premium, although 6 percent did report the premium to be a "big problem." Most reported that they had been relatively stable in their overall health since joining BadgerCare. Further, BadgerCare and Medicaid enrollees were found to be about equally satisfied with their insurance and services.

The satisfaction of BadgerCare enrollees was measured using a standardized, nationally-used survey, the "Consumer Assessment of Health Plans (CAHPS)." Last used to assess Wisconsin Medicaid enrollees in 1999, BadgerCare was not operational when the last survey was initiated; hence the 2002 survey was the first to include BadgerCare enrollees. Five additional questions were added to the CAHPS instrument specifically for BadgerCare enrollees.

The 2002 satisfaction report was completed in December 2003.[57] BadgerCare respondents were represented in the sample according to the proportion they represented in the combined family Medicaid plus BadgerCare population. All survey respondents had to have been continuously enrolled in AFDC Medicaid or Healthy Start or BadgerCare for a six month period between February 25, 2002 and August 25, 2002 to be eligible for the survey.

APS Healthcare, which conducted the 2002 survey for the Division of Health Care Financing, provided data for use in this evaluation. These data included the results for individual questions, and for seven summary variables which consisted of aggregated survey items (five composite summary measures) or a single key question (two global measures).

APS Healthcare reports that the overall response rate to the survey was 39.2 percent, which was slightly lower than the target response rate of 40 percent. The response rate for BadgerCare (48.3 percent was significantly greater than for Medicaid recipients (35.6 percent) (chi square=153.4, df=1, probability less than 1 percent). The sample size varied very slightly by item, but the total number of completed surveys from all eligibles was 4,605. Of these, 3,145 were family Medicaid enrollees, and 1,460 were BadgerCare recipients.

[57] 2002 Medicaid BadgerCare and Managed Care Recipient Satisfaction Survey Results, December 2003, Prepared by APS Healthcare for the Division of Health Care Financing

Because the Medicaid and BadgerCare groups differed on some demographic variables and had a different response rate, the data were statistically weighted by APS Healthcare to eliminate population differences between groups. The data also were weighted to eliminate differences in the probability of being selected for the sample because of size differences in the HMO populations. The weighted data were analyzed in this report, as well as in the DHCF/APS Healthcare report.

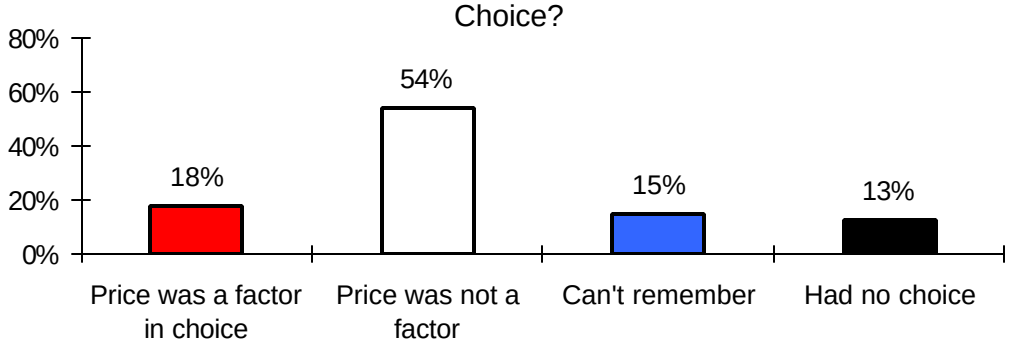
Six satisfaction objectives, listed above, were developed by DHCF and OSF staff for this evaluation. The results of CAHPS questions assessing these objectives are given below. Following this, BadgerCare satisfaction is compared with the satisfaction of AFDC/Healthy Start Medicaid recipients in terms of the seven summary variables noted above.

Objective Six: Determine if the price of coverage (BadgerCare premium) presents a hardship for participants, and if premiums were a factor in their decision to enroll.

Thirty-five percent of BadgerCare participants reported that they did not choose their health plan, but rather were assigned to a plan, while sixty-five percent reported choosing their health plan.

Of the sixty-five percent who chose their health plan, eighteen percent reported that the price of coverage was a factor in their choice, while fifty-four percent reported that price was not a factor. Fifteen percent could not recall if it was a factor, and thirteen percent reported that they had no choice (see Figure 14 below).

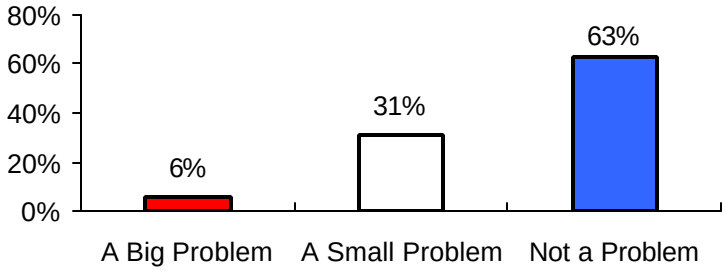
Figure 14
Was Price of Coverage a Factor in Choosing the Health Plan for BadgerCare Enrollees Who Reported They had a Choice?



BadgerCare families with incomes at or above 150 percent of FPL paid a premium equal to three percent of their income when the survey was completed. Twenty-five percent of BadgerCare survey participants indicated that they paid part of the cost of their health plan, while seventy-five percent reported not paying any of the cost.

Among those who paid a premium, six percent reported that, in the last 6 months, the price of the premium was a big problem, see Figure 15 below. Thirty-one percent viewed it as a small

Figure 15
Do BadgerCare Premiums Present a Hardship for those Participants Who Paid Part of the Cost of Their Health Plan?



problem, and sixty-three percent said the price was not a problem. Therefore, the three percent premium was not viewed as a major problem by the great majority (94 percent) of BadgerCare recipients.

The RTI evaluation of BadgerCare included a BadgerCare Family Survey which contacted, in addition to program participants, families that were eligible for BadgerCare but not participating.[58] Respondents in the latter group selected reasons for non-participation. The chief three reasons were that they were told they did not qualify (49.2 percent), the application paperwork was too hard (33.9 percent),[59] and they thought their family was not eligible (30.5 percent). The response "could not pay premiums" ranked eighth on the list of ten reasons; only 10.2 percent of non-participants selected this as a reason for not joining BadgerCare. However, the authors note that since only about 22 percent of BadgerCare enrollees are required to pay premiums, the mere perception of the premium could be holding back applicants who would not be required to pay it.

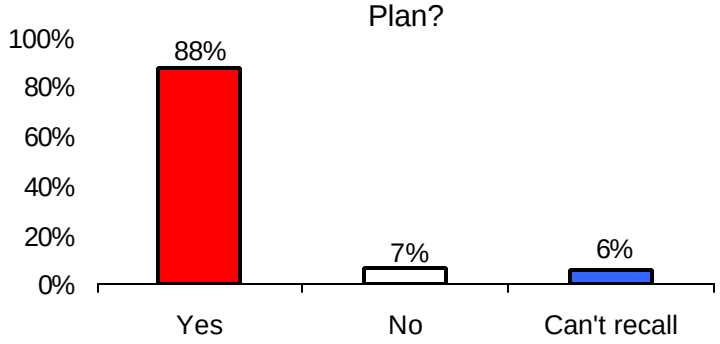
The BadgerCare premium for families with incomes at or above 150 percent of FPL increased from three percent to five percent on January 1, 2004. Therefore, it is likely that more families will find the premium burdensome in the future. The number of BadgerCare enrollees paying premiums fell from 19,766 in December 2003 to 17,300 in April 2004. It is too early to determine if this is merely a seasonal fluctuation as has occurred in past winters, or an effect of the premium increase.

Objective Seven: Determine if BadgerCare participants are satisfied with the array of health care services available to them under their coverage.

[58] Evaluation of the BadgerCare Medicaid Demonstration, Final Report, RTI International, December 2003
[59] The data collection ended in September 2002, about a year after the mail-in, simplified application was implemented. However, there is no information on whether non-participants had an opportunity to consider the simplified application process.

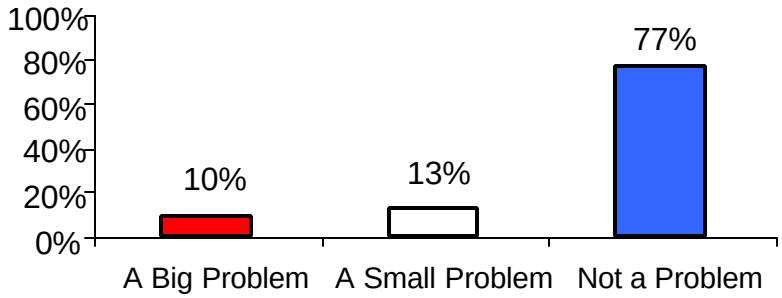
A great majority of BadgerCare participants were satisfied with their service coverage. Eighty-eight percent of BadgerCare participants reported that they were satisfied with the benefits available in their health plan when they started their current plan, while seven percent said they

Figure 16
Were BadgerCare Enrollees Satisfied with Benefits when They Started Their Health Plan?



were not satisfied with the benefits. Six percent could not recall how they felt when they started (see Figure 16). Data in this and other figures may not equal 100 percent due to rounding.

Figure 17
How Much of a Problem, if any, Was it for BadgerCare Enrollees to Get a Personal Doctor or Nurse They Were Happy With?

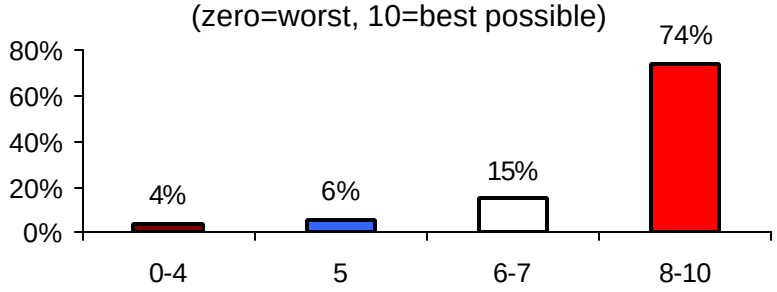


Furthermore, most BadgerCare respondents were happy with their personal physician, and did not find it difficult to find a physician who pleased them. Participants were asked: "With the choices your health plan gave you, how much of a problem, if any, was it to get a personal doctor or nurse you are happy with?" Seventy-seven percent of BadgerCare respondents viewed this as not a problem, thirteen percent as a small problem, and only ten percent as a big problem (see Figure 17).

Finally, when asked to rate all of their experience with their health plan on a scale from zero (worst) to ten (best possible), BadgerCare respondents were very positive. Seventy-four percent of BadgerCare participants rated their health plan an 8, 9, or 10, while fifteen percent rated it as a

6 or 7. Therefore, a total of eighty-nine percent rated their plan above the middle of the scale. Six percent rated their plan as a 5, while four percent rated it below 5 (see Figure 18 below).

Figure 18
BadgerCare Participants Rate All of Their Experience with Their Health Plan (zero=worst, 10=best possible)

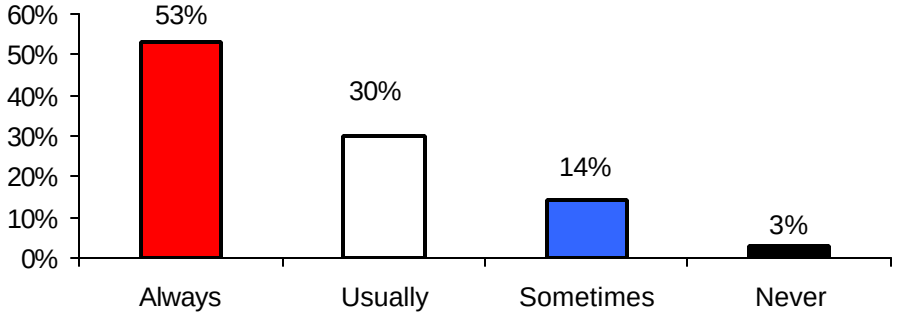


Objective Eight: Determine if BadgerCare participants are satisfied or dissatisfied with waiting time for medical appointments.

When asked if they had sought an appointment for a routine check-up in the last six months, sixty percent of BadgerCare enrollees answered yes, while forty percent said no.

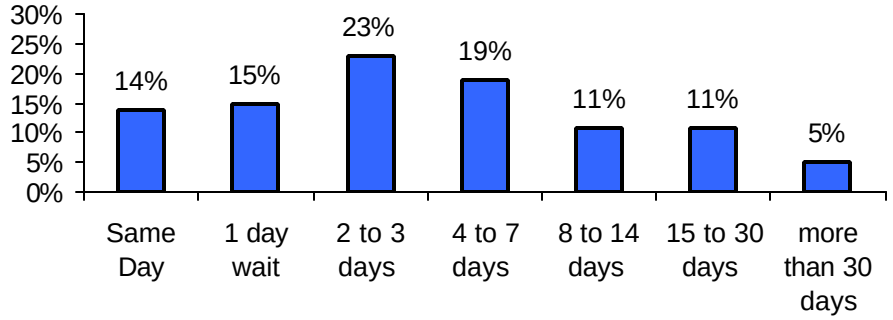
Of the sixty percent seeking an appointment in the last six months, fifty-three percent reported they always got an appointment for regular or routine health care as soon as they wanted, while thirty percent said they usually did. Fourteen percent said they sometimes did, and three percent reported that they never got an appointment for regular or routine health care as soon as they wanted (see Figure 19 below).

Figure 19
Percent of BadgerCare Enrollees Who Got an Appointment for Regular or Routine Health Care as Soon as They Wanted



When the same respondents were asked how many days they usually have to wait between making an appointment for regular or routine health care and actually seeing a provider, seventy-one percent of BadgerCare recipients reported waiting one week or less before seeing a provider, while eleven percent reported an 8 to 14 day wait. Sixteen percent reported waiting 15 or more days. (Less than two percent reported they had not needed an appointment.) A more detailed description is provided in Figure 20 below.

Figure 20
How Many Days Do BadgerCare Participants Usually Have to Wait Between Making an Appointment for Regular or Routine Health Care and Actually Seeing a Provider?



Forty-four percent of BadgerCare respondents reported that they had an illness or injury in the last 6 months that needed care right away from a doctor's office, clinic, or emergency room. Of these respondents, seventy-two percent reported that they always got the care as soon as they wanted, nineteen percent reported that they usually did, six percent said sometimes, and two percent said they never got the care as soon as they wanted (see Figure 21 below).

Figure 21
Percent of BadgerCare Enrollees Who Received Needed Care for an Illness or Injury Right Away in the Last 6 Months

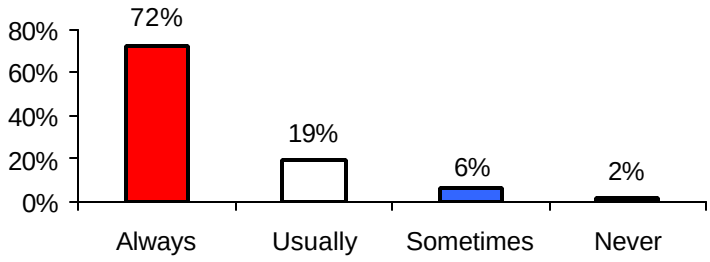
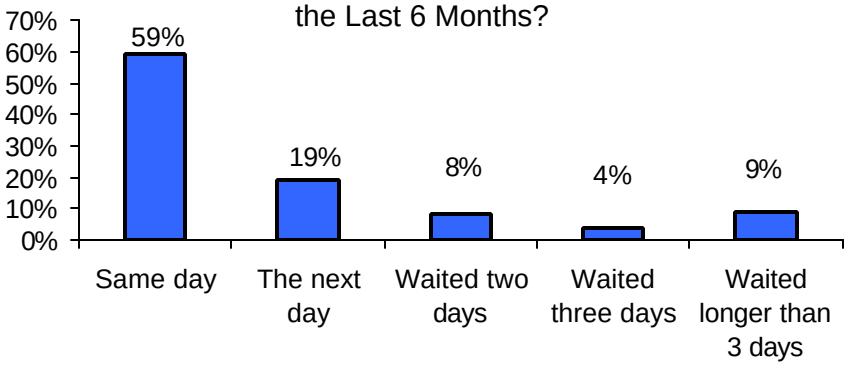


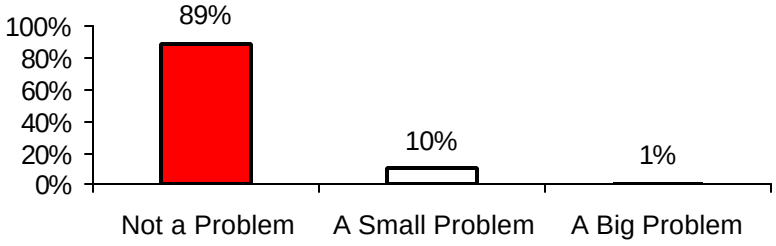
Figure 22
How Long Did BadgerCare Participants Have to Wait for an Appointment for an Illness or Injury in the Last 6 Months?



Of those who needed care for an illness or injury during the last 6 months, fifty-nine percent said they were able to get care the same day, nineteen percent said the next day, eight percent waited two days, four percent waited three days, nine percent reported having to wait longer than 3 days.

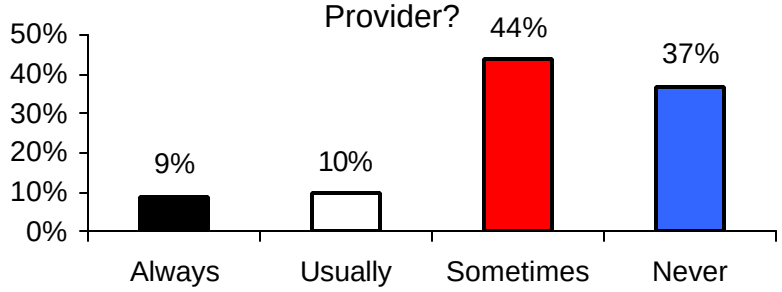
Participants were also asked how much of a problem, if any, were delays in health care while they waited for approval from their health plan. Eighty-nine percent of BadgerCare participants reported that this was not a problem, while ten percent reported that it was a small problem, and less than one percent described it as a big problem (see Figure 23).

Figure 23
For BadgerCare Participants How Much of a Problem, if any, Were Delays in Health Care While They Waited for Approval From Their Health Plan?



Participants were also asked how often they waited in the doctor's office or clinic more than 15 minutes past their appointment time to see the person they went to see. Nine percent reported always having to wait longer than 15 minutes, ten percent reported usually having to wait longer, and forty-four percent reported sometimes having to wait longer than 15 minutes. Thirty-seven percent reported never having to wait longer than 15 minutes (see Figure 24 below).

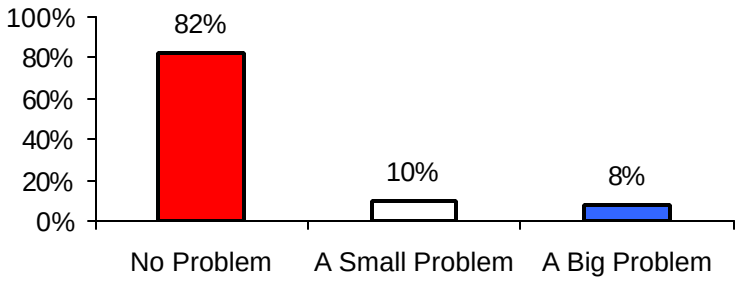
Figure 24
How Often Did BadgerCare Enrollees Wait Longer Than 15 Minutes Past Their Appointment Time to See the Health Care Provider?



Objective Nine: Determine if BadgerCare participants are satisfied or dissatisfied with their ability to secure referrals to medical specialists.

The majority, eighty-two percent, of BadgerCare participants reported no problem in getting a referral to a specialist that they needed to see. Ten percent reported that this was a small problem, and eight percent reported that it was a big problem (see Figure 25 below).

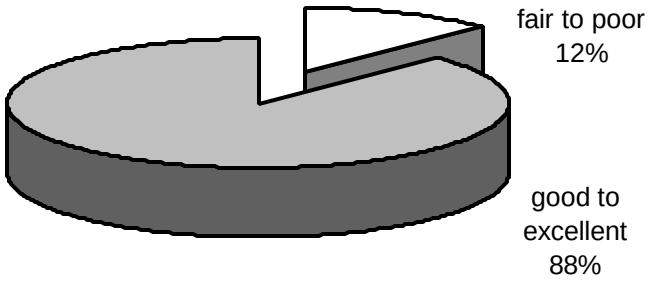
Figure 25
How Much of a Problem Did BadgerCare Enrollees Have in Getting a Referral to a Specialist That They Needed to See?



Objective Ten: Determine if BadgerCare participants believe their health has improved, stayed the same, or gotten worse since enrolling in BadgerCare.

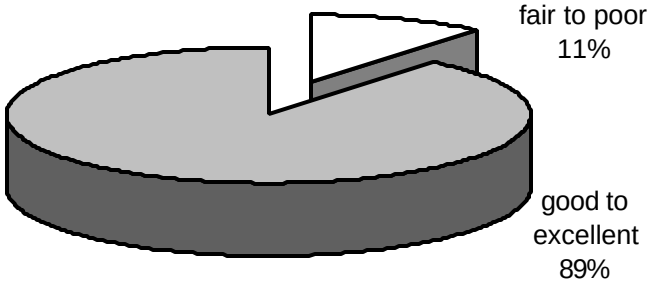
BadgerCare enrollees were asked to rate their overall health at the time they started their current health plan. Three percent rated their overall health poor, nine percent rated it fair, twenty-five percent rated it good, thirty-four percent rated it very good, and twenty-nine percent rated their overall health excellent (see Figure 26 below).

Figure 26
BadgerCare Enrollees Rating of Their Health When They Started Their Current Health Plan



They were also asked to rate their overall health "now." Fewer than two percent rated it poor, nine percent rated it fair, twenty-five rated it good, thirty-seven percent rated it very good, and twenty-seven percent rated it excellent (see Figure 27 below).

Figure 27
BadgerCare Enrollees Rating of Their Health Now

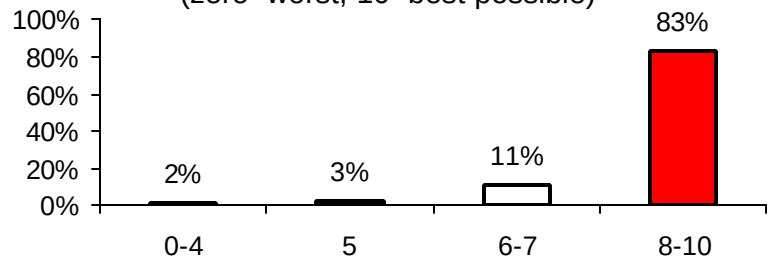


On a proportional basis, therefore, BadgerCare enrollees rated their health about the same at the start of insurance, and at least six months later.

Objective Eleven: Determine if BadgerCare participants are satisfied with the quality of care received.

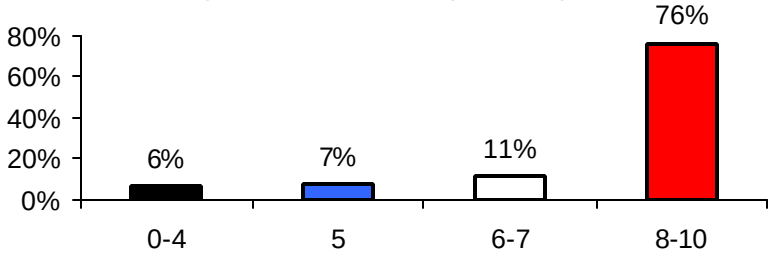
Among participants who have one person that they think of as their personal doctor or nurse, (n=1052) eighty-three percent rated their personal doctor or nurse 8, 9, or 10 out of a scale of zero to ten (see Figure 28 below).

Figure 28
BadgerCare Participants Rating of Personal Doctor or Nurse
(zero=worst, 10=best possible)



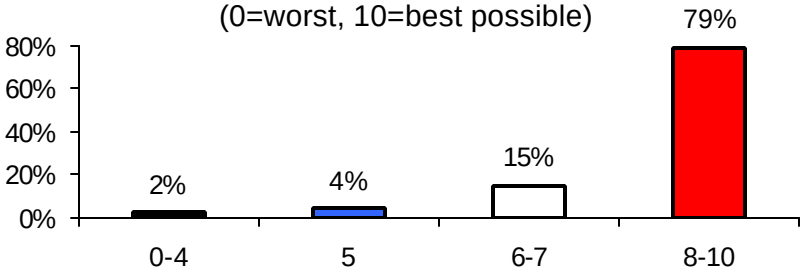
BadgerCare participants (n=1070) were also asked to rate the specialist they saw most often in the last 6 months (including a personal doctor if he or she was a specialist). Seventy-six percent of the specialists were rated 8, 9, or 10, eleven percent were rated 6 or 7, seven percent were rated 5, and six percent were rated lower than 5 (see Figure 29 below).

Figure 29
BadgerCare Participants Rating of Specialist Seen Most Often in Last 6 Months
(0=worst, 10=best possible)



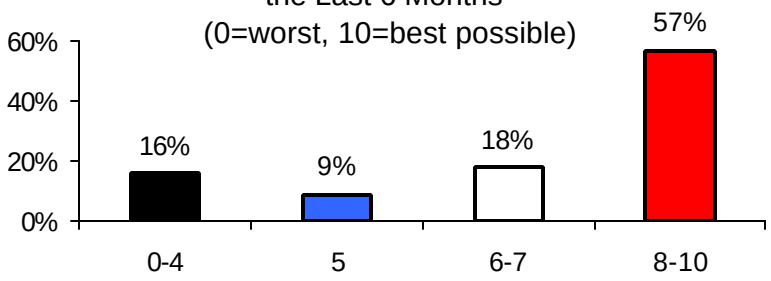
Participants (n=1028) were also asked to rate all their health care in the last 6 months from all doctors and other health providers. Seventy-nine percent rated all health care providers 8, 9, or 10, fifteen percent rated them 6 or 7, four percent rated them 5, and two percent rated them lower than 5 (see Figure 30 below).

Figure 30
BadgerCare Participants Rating of All Health Care Received in the Last 6 Months from All Doctors and Other Health Care Providers
(0=worst, 10=best possible)



About nine percent of participants (n=130) had received drug/alcohol/mental health treatment and/or counseling. Fifty-seven percent of BadgerCare enrollees gave ratings as high as 8, 9 or 10 to these providers, eighteen percent rated them 6 or 7, nine percent rated them 5, and sixteen percent rated them lower than 5 (see Figure 31 below). On a proportional basis, respondents were most satisfied with their personal doctor or nurse, and least satisfied with their drug/alcohol/mental health treatment.

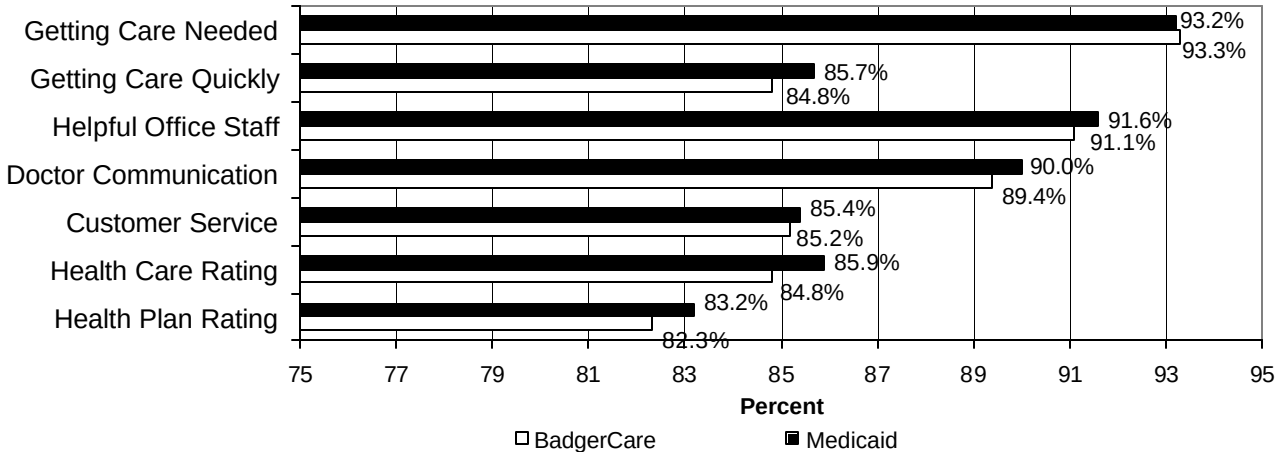
Figure 31
BadgerCare Enrollees Rating of All the Treatment and Counseling They Received in the Last 6 Months
(0=worst, 10=best possible)



BadgerCare recipients were also compared to AFDC Medicaid and Healthy Start participants in terms of satisfaction. The measures used included the results for seven summary variables which consist of either of aggregated survey items (five composite summary measures) or a single key question (two global measures). The standardized measures are more reliable than individual questions, and are therefore more amenable to statistical testing.

The results are presented below in Figure 32. There were no significant differences between the two populations on any of the seven measures.

Figure 32
BadgerCare Enrollees Compared to Medicaid Enrollees on Composite Satisfaction Ratings



BadgerCare and Substitution of Coverage

According to data compiled by the Kaiser Foundation, Wisconsin enjoys one of the highest rates of employer sponsored health insurance (ESI) in the nation.[60] During 2001-2002, the percent of Wisconsin non-elderly adults age 19-64 with ESI averaged 74 percent (ranked fourth in nation) compared to a national average of 67 percent. Lower income persons under 200 FPL in Wisconsin are also more likely to have ESI than their national counterparts by a 37 percent to 30 percent margin. However, one possible consequence of publicly funded health insurance for low income, employed families could be to undermine this situation by shifting the insurance burden from employers to the public sector. The unintended substitution of public coverage for ESI is commonly referred to as "crowd-out." With reference to BadgerCare, the DHCF defines crowd out as occurring in the following three situations:[61]

- "Families drop employer-sponsored coverage as a direct result of the extension of BadgerCare (subsidized coverage not previously available).

- Families enrolled in BadgerCare choose to remain in BadgerCare despite access to employer-sponsored coverage.

- Employers reduce or drop their contribution to family coverage in direct response to BadgerCare eligibility policies."

[60] Kaiser State Health Facts Online, 2001-2002

[61] Annual Report of State Children's Health Insurance Plans Under Title XXI of the Social Security Act, Federal Fiscal Year 2000, Wisconsin Division of Health Care Financing

BadgerCare is intended to help families in the workforce receive affordable public health insurance until they can obtain insurance from their employment. BadgerCare eligibility policies were specifically designed to prevent the "crowd-out" of private insurance.

Objective 12: Describe BadgerCare program provisions designed to prevent enrollees from dropping other insurance coverage in order to participate in BadgerCare, and assess whether or not BadgerCare enrollees dropped other insurance coverage in order to participate in BadgerCare.

In a 2001 study, Lutzky and Hill[62] summarize how eighteen states, including Wisconsin, address the substitution of coverage in their SCHIP programs. The authors note seven strategies used by states to reduce or eliminate crowd-out. These include waiting periods, monitoring, application questions on insurance status, verifying applicant coverage status against private coverage data bases, cost sharing in the form of premiums or enrollment fees or copayments, limited subsidization of ESI, and imposing legal obligations on employers and/or insurers not to alter coverage because of SCHIP.

Wisconsin uses several of these strategies through program policies that were implemented in the BadgerCare enrollment and verification process.

Applicants are asked about their insurance coverage in the application process. Applicants having health insurance coverage that meets the standards of the Health Insurance Portability and Accountability Act (HIPAA) are not eligible for BadgerCare.

Lutzy and Hill state that waiting periods are the most common tool used by states to prevent crowd-out, and also the most stringent. Wisconsin applies waiting periods to both ESI coverage and to ESI access. People with insurance coverage in the three months prior to their application are ineligible for BadgerCare except under extenuating circumstances, for example involuntary loss of employment and coverage. Furthermore, applicants with access to ESI in the 18 months preceding application in which the employer pays 80 percent or more of the premium are ineligible, provided the coverage meets HIPAA standards. Both of these waiting periods are designed to prevent families from dropping ESI in order to take up BadgerCare.

BadgerCare also subsidizes certain ESI plans through a premium assistance program for uninsured families with employers who offer ESI, and pay at least 40 percent, but less than 80 percent, of the premium. Wisconsin's Health Insurance Premium Purchase (HIPP) program also requires that participants receive wraparound services if the employer's health plan is not as comprehensive as BadgerCare, and that the resulting premium and service package be cost effective compared to BadgerCare HMO family coverage. Premium assistance programs are intended to maximize private sector coverage, to strengthen ESI, and to deter crowd-out by

[62] Has the Jury Reached a Verdict? States Experiences with Crowd Out Under SCHIP, Amy Westfahl Lutzky and Ian Hill, Assessing the New Federalism Program, The Urban Institute, June 2001

helping employers and employees afford coverage.[63] Wisconsin views HIPP as one strategy used to prevent crowd-out.[64] The relatively small number of qualifying families has limited the size of HIPP; as of April 30, 2004, 210 families had participated in HIPP, with 105 families active on that date.

Wisconsin verifies applicant coverage in two ways. First, for employed applicants, Wisconsin mails an Employer Verification of Insurance Coverage (EVIC) to their employer to determine if they are eligible for Wisconsin's HIPP program. Non-responding employers are telephoned once to elicit the information. The information from this survey is intended primarily as a screening process for HIPP; however, applicants and enrollees may be disallowed or terminated on the basis of this information. By June 2003, the available EVIC data indicate that 49.2 percent of employed applicants had no access to family coverage, 21.7 percent had access to a self-funded employer plan, less than one percent had no access to a HIPAA plan, less than two percent had access to a state plan, and 3.4 percent were still being processed. The remaining applicants fell into categories that may have disqualified them for BadgerCare: 7.2 percent had access to an employer HIPAA plan, 6.3 percent were insured, and 9.4 percent had access to an employer plan within 18 months that provided 80 percent or more of the premium.[65] However, because this data is primarily a HIPP screening process, and because the usable response rate is relatively incomplete (see below), no records are kept on the number of applicants screened out by this process.

The EVIC survey has a non-response rate of about 29 percent, while the rate of "no longer employed" returns is about 24 percent. Taken together, this means that about 47 percent of all employer surveys mailed do not yield any information about applicants.

A new process was implemented in May 2004 to improve this situation. Rather than mail a survey to all employers, employed applicants are now required to have their employers complete a form to verify income, whether ESI is offered, and the amount paid by the employer toward ESI. Return of a completed form is required as a condition of eligibility for BadgerCare. The mailed EVIC form, in a simplified format, is now only mailed to employers in cases in which the employee is potentially eligible for HIPP, that is, when the employer pays 40 to 80 percent of an offered ESI plan. EVICs returned in the future will be solely for the purpose of obtaining information about the insurance offered, in order to test the cost-effectiveness of participation in HIPP.

The new process for verifying the status of employed applicants will yield more complete information for screening employed applicants for BadgerCare generally, and should increase the number of families found eligible for HIPP. The results will also be monitored in the future to determine the rate at which BadgerCare applicants are screened out to access to ESI or current coverage.

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[63] Has the Jury Reached a Verdict? States Experiences with Crowd Out Under SCHIP, Amy Westfahl Lutzky and Ian Hill, Assessing the New Federalism Program, The Urban Institute, June 2001.

[64] Annual Report of the State Children's Health Insurance Plans Under Title XXI of the Social Security Act, Federal Fiscal Year 2003, Division of Health Care Financing.

[65] Employer Verification of Insurance Coverage (EVIC) Cumulative Data, Division of Health Care Financing, April 2004.

The second BadgerCare verification process matches MMIS enrollment data, including BadgerCare enrollment, to a private insurance database of carriers in Wisconsin. This match is done on a monthly basis, but aggregate statistics concerning the number of disenrolled BadgerCare clients are not issued.

As noted previously, BadgerCare also requires a premium from participants with an income equal to or greater than 150 percent of FPL to pay a monthly premium equal to 5 percent of their income. Lutzy and Hill list premiums and enrollment fees as a mechanism for deterring crowd-out. However, the BadgerCare premium was not instituted for this purpose; as noted previously, it was meant to ensure that recipients have a stake in the program, to provides assurance to the public and the Legislature that BadgerCare is not simply a "welfare" program, and to increase the acceptability of the program to potential applicants unwilling to "accept charity."

Objective 13: Determine if Wisconsin employers are currently changing their health care benefit packages, the nature of any changes (increasing, decreasing, dropping), the reasons for any changes, and the possible impact on BadgerCare.

Medical Expenditure Panel Survey (MEPS) data indicates a decline in access to employee-sponsored health insurance since BadgerCare started for Wisconsin employees working in private sector establishments. Declines have been seen in the percent of employees working in establishments that offer employee-sponsored insurance, especially in establishments with less than 50 employees. Declines have also been seen in the percent of employees who are eligible for employer-sponsored insurance in firms with 50 percent or more low-wage employees. MEPS data also indicates that Wisconsin employees in low wage private-sector establishments are paying for an increasingly larger share of the health insurance premiums offered through their employers. However it is likely that factors other than BadgerCare are responsible for these changes. The implication for BadgerCare is that there will be increased demand for coverage.

Context

BadgerCare served 101,616 persons ages 19 or older in CY 2001 (Appendix I, Table 1). This represented a small share of the state's 2,484,019 private-sector employees that year and less than 20 percent of the state's 613,115 private-sector employees with the lowest wages.[66] Thus it is unlikely that BadgerCare could have had a major impact on the availability or nature of employer-sponsored health insurance in the state. Factors such as increases in the cost of insurance premiums and changing economic conditions are much more likely to be responsible for changes seen in access to employer-sponsored health insurance. In commenting on the widespread decline in employer-sponsored insurance between 2000 and 2002 nationally, Holahan and Wang note that:

"Reductions in ESI were attributable to declines in employment; shifts of employment from large to small firms (or self-employment) and from high- to low-ESI industries; and the rising cost of health care, which was likely to have affected employer offer rates, take-up rates, or both. The predominant way in which Americans have health insurance coverage is through employers,

[66] Medical Expenditure Panel Survey (MEPS) Survey, Table VIII B 1, 2001.

but in the past two years (2000-2002) we have seen that this coverage is quite vulnerable to economic fluctuations.[67]"

The remainder of this section describes the availability of ESI in Wisconsin since BadgerCare started, the incidence of private sector employees with access to ESI, and the out-of-pocket costs associated with family coverage ESI plans.

A primary source of information on the number of Wisconsin private sector employers who offer health care benefits and the type of benefits they provide is the insurance component of the annual Medical Expenditure Panel Survey (MEPS). The MEPS Insurance Component collects data on the number and types of private insurance plans offered, benefits associated with these plans, premiums, and contributions by employers and employees and employer characteristics.[68] The MEPS is co-sponsored by the Agency for Healthcare Research and Quality (AHRQ) and the National Center for Health Statistics (NCHS). The most recent available data are for 2001.

The MEPS survey also provides information on insurance coverage for persons working in low wage establishments. Because the criteria for low wage changed in 2000, making comparisons across the 1999-2000 survey years is not recommended. The definition for "low wage" changed from $6.50 an hour or less in 1999 to earning at or below the 25th percentile for all hourly wages in the United States based on data from the Bureau of Labor Statistics ($9.50 an hour or less for 2000 and 2001). Information about low wage firms for 1999 included in this paper is for reference only.

Information on low wage firms in this paper is presented for establishments having 50 percent or more "low wage" employees. It also is presented using wage "quartiles." The MEPS Survey established 4 groups of private-sector establishments, each containing 25 percent of the total U.S. employment. Establishments in the lowest of the four quartiles (1st quartile) have lower average payrolls per employee (compensation excluding fringe benefits) than any establishment in the 2nd quartile. For 2002 and 2001, persons in the lowest (1st) wage quartile had an average wage of $9.50 per hour.

The information analyzed from the MEPS survey in this section reflects the private sector. The MEPS survey also collects information on employer-sponsored insurance for the public sector, but the information is not summarized at the state level.

Information analyzed from the MEPS survey for Wisconsin's private sector employers showed the following patterns from 1999 to 2001:

Access to Employer-Sponsored Insurance:

- Essentially no change in the percent of private-sector establishments in Wisconsin that offer employer-sponsored insurance, but a slight decline in the incidence of all private-sector employees in Wisconsin working in establishments that offer employer-sponsored insurance

[67] Changes in Health Insurance Coverage During the Economic Downturn:2000-2002 by John Holahan and Marie Wang, January 2004.

[68] Estimation of Expenditures and Enrollments for Employer-sponsored Health Insurance, MEPS Methodology Report 14.

(91 percent to 89 percent) and a considerable decline (72.9 percent to 65.4 percent) in firms with 50 or fewer employees

- Essentially no change in the statewide incidence of employees working in Wisconsin establishments that offer employer-sponsored insurance who are eligible for employee sponsored insurance, but a significant decline between 2000 and 2001 in the percent of employees working in low wage establishments that offer employer-sponsored insurance who are eligible for employer-sponsored insurance (59 percent to 46 percent)

Cost of Employer-Sponsored Insurance:

- Essentially no change in the percent of Wisconsin private-sector establishments offering health insurance that require no employee contribution for family coverage or in the incidence of all private-sector employees in Wisconsin working in establishments offering family coverage that required no employee contribution
- Significant increases in the cost of premiums for family coverage in Wisconsin, especially in firms with 50 or fewer employees
- Little change in the employee share for family coverage in private-sector workplaces statewide, but a possible large increase in the employee share in private-sector workplaces with 50 percent or more low-wage employees. There was an increase between 2000 and 2001 of 23.5 percent to 30.4 percent.

Establishments Offering Employer-Sponsored Insurance

The MEPS data shows no statistically significant change in the overall percent of Wisconsin firms offering health insurance since BadgerCare started in 1999; this trend is similar to the pattern for the US as a whole.

Table 8
Private Firms Offering Health Insurance

Year	U.S.	WI
1999	58.4%	61.4%
2000	59.3%	58.3%
2001	58.3%	60.8%

Source: MEPS Table II.A. 2

Employees with Access to Employer Insurance

Despite the relative stability in the percent of Wisconsin employers offering health insurance, there has been a slight decline in the incidence of employees working in establishments that offer employer-sponsored insurance. This decline was primarily among small employers in Wisconsin. A similar decline in small establishments was also seen nationally.

Table 9
Percent of Private-Sector Employees in Establishments
that Offer Health Insurance

Year	U.S. < 50 employees	U.S. 50 or > employees	U.S. Total	WI < 50 employees	WI 50 or > employees	WI Total
1999	67.6%	98.3%	89.1%	72.9%	99.8%	91.3%
2000	67.8%	98.1%	89.4%	70.7%	98.9%	90.2%
2001	64.5%***	98.2%	88.8%	65.4%**	98.9%	88.9%*

Source: MEPS Table II. B 2
*The change from 1999 to 2001 was statistically significant for all WI firms
(Z= 1.83 p=0.067)
**The change from 1999 to 2001 was statistically significant for small WI firms
(Z= 2.83 p=0.005)
*** The change from 1999 to 2001 was statistically significant for small firms in the U.S. (Z= 3.37 p=0.00)
The change from 1999 to 2001 was not statistically significant for large WI firms or for the U.S. overall or for large firms in the U.S.

Employees Eligible for Employer-Sponsored Insurance

A more sensitive measure of employee access to employer-sponsored insurance is the percent of employees in establishments with employer-sponsored insurance who are eligible for employer-sponsored insurance. Table 10 shows no statistically significant change in the state overall or in small establishments.

Table 10
Percent Of Private-Sector Employees Eligible For Employer-Sponsored Insurance In
Establishments That Offer Health Insurance by Firm Size

Year	U.S. < 50 employees	U.S. 50 or > employees	U.S. Total	WI < 50 employees	WI 50 or > employees	WI Total
1999	79.1%	78.4%	78.5%	76.9%	75.8%	76.1%
2000	78.8%	78.9%	78.9%	67.5%	80.7%	77.5%
2001	77.5%	78.0%	77.9%	73.9%	78.6%	77.6%

Source: MEPS Table II. B 2 a
The change from 1999 to 2001 was not statistically significant for all firms in WI nor for small or large WI firms or for the U.S. overall.

Table 11, however, shows that there was a significant decline in the percent of employees in low wage firms with 50 percent or more low wage employees who were eligible for employer-sponsored insurance between 2000 and 2001.

Table 11
Percent Of Wisconsin Private Sector Employees Eligible For Employer-Sponsored Insurance In Firms Offering Health Insurance With 50 Percent or More Low Wage Employees.

Year	Percent	Standard Error
1999	41.0%	8.14%
2000	59.0%	4.89%
2001	45.8%*	2.77%

Source: MEPS on-line data for Wisconsin.
Definition for low wage changed in 2000 increasing from $6.50 an hour or less to earning at or below the 25th percentile for all hourly wages in the United States based on data from the Bureau of Labor Statistics ($9.50 an hour or less for 2000 and 2001). Because the criteria for low wage changed, making comparisons across the 1999-2000 survey years is not recommended.
*The change between 2000 and 2001 was statistically significant. ($Z = 2.348$ $p < 0.02$)

Employee Costs for Employer-Sponsored Insurance

A key issue for using employer-sponsored insurance is the out-of-pocket cost to the employee. Data from the MEPS provides information on the out-of-pocket cost to the employee for employer-sponsored insurance. Specific indicators include:

- Percent of private-sector establishments that offer health insurance that offer at least one health insurance plan that required **no contribution** from the employee for family coverage
- Average **total family premium** (in dollars) per enrolled employee at private sector establishments that offer health insurance
- **Employee contribution** for family coverage as a share of the total.

Wisconsin has experienced essentially no change in the percent of establishments offering health insurance that require no employee contribution for family coverage; however the U.S. as a whole has shown a statistically significant decline for all firms and among small firms.

Table 12
Percent Of Private-Sector Establishments Offering At Least One Insurance Plan That Required No Employee Contribution For Family Coverage

Year	U.S. < 50 employees	U.S. 50 or > employees	U.S. Total	WI < 50 employees	WI 50 or > employees	WI Total
1999	41.3%	8.6%	29.0%	43.4%	7.3%	30.7%
2000	42.4%	7.6%	28.6%	43.1%	8.6%	30.6%
2001	39.7%**	9.4%	27.5%*	44.9%	9.2%	31.9%

Source: MEPS Table II.A. 2 c
*The change between 1999 and 2001 was statistically significant for all U.S. firms ($Z=2.45$ $p=0.01$)
**The change between 1999 and 2001 was statistically significant for small U.S. firms ($Z=1.63$ $p=0.10$)
The changes from 1999 to 2001 were not statistically significant for WI firms overall or for small or large WI firms.

There also has been essentially no change in the percent of private-sector employees in Wisconsin enrolled in a health insurance plan with family coverage that required no employee contribution (Table 13), nor has there been a change for low wage firms (Table 14).

Table 13
Percent of Private Sector Employees in Wisconsin Enrolled in a Health Insurance Plan with Family Coverage that Required No Employee Contribution

Year	Percent	Standard Error
1999	14.4%	1.91%
2000	16.0%	3.32%
2001	17.3%	3.69%

Source: MEPS on-line data for Wisconsin
The change between 1999 and 2001 was not statistically significant nor was the change from 2000 to 2001.

Table 14
Percent Of Wisconsin Private Sector Employees Enrolled In
A Health Insurance Plan With Family Coverage That Required No Employee Contribution For Firms With 50 Percent or More Low Wage Employees

Year	Percent	Standard Error
1999	31.9%	13.72%
2000	10.8%	6.49%
2001	25.3%	7.13%

Source: MEPS on-line data for Wisconsin
Definition for low wage changed in 2000 increasing from $6.50 an hour or less to earning at or below the 25th percentile for all hourly wages in the United States based on data from the Bureau of Labor Statistics ($9.50 an hour or less for 2000 and 2001). Because the criteria for low wage changed, making comparisons across the 1999-2000 survey years is not recommended.
The change between 2000 and 2001 was not statistically significant.

The average premiums for family coverage have been increasing in Wisconsin and nationally from 1999 through 2001. Increases in average premiums for family coverage in Wisconsin (28.8 percent) have been less than for the U.S. as a whole (34.3 percent), and smaller firms have had higher percentage increases in both Wisconsin and the nation (Table 15).

Table 15
Average Premiums for Family Coverage

Year	U.S. < 50 employees	U.S. 50 or > employees	U.S. Total	WI < 50 employees	WI 50 or > employees	WI Total
1999	$6,061.99	$6,057.26	$6,058.12	$6,450.23	$6,481.37	$6,475.08
2000	$6,867.88	$6,752.27	$6,772.47	$7,294.69	$7,075.45	$7,112.16
2001	$7,703.70	$7,472.81	$7,508.94	$8,220.90	$7,370.12	$7,555.83
% ↑	41.6%	32.9%	34.3%	45.8%	24.5%	28.8%

Source: MEPS II D. 1

While there has been little percentage change in the employee contribution as a share of the total premium overall from 1999 through 2001 (Table 16), there has been an increase in the employee share among employees in private-sector employers with a high proportion of low wage employees (Table 17).

Table 16
Employee Contribution for Family Coverage as a Share of the Total Premium-
All Wisconsin Private Sector Establishments

Year	Average Premium	Employee Average Share	Employee Average Share as a % of the Total *
1999	$6,475.08	$1,385.39	21.4%
2000	$7,112.16	$1,460.14	20.5%
2001	$7,555.83	$1,526.54	20.2%

*Computed based on on-line data from MEPS.

Table 17
Employee Contribution for Family Coverage as a Share of the Total Premium – Wisconsin Private Sector Establishments with 50 Percent or More Low-Wage Employees

Year	Average Family Premium	Employee Average Share	Employee Average Share as a % of the Total
1999	$8,229.56	$1,841.59	22.4%
2000	$7,248.89	$1,704.68	23.5%
2001	$7,818.06	$2,374.01	30.4%

Source: Computed based on on-line data from MEPS.
Definition for low wage changed in 2000 increasing from $6.50 an hour or less to earning at or below the 25th percentile for all hourly wages in the United States based on data from the Bureau of Labor Statistics ($9.50 an hour or less for 2000 and 2001). Because the criteria for low wage changed, making comparisons across the 1999-2000 survey years is not recommended.

BadgerCare and HMO Capacity

Objective 14: Determine whether or not BadgerCare resulted in an increase in HMO capacity in Wisconsin

The results indicate a large increase in the absolute number of family Medicaid and BadgerCare enrollees in managed care since July 1999 when BadgerCare enrollment began. The overall percentage of persons in managed care declined by about 13 percent in the 18 months following BadgerCare start-up, then increased by about four percent and has remained relatively stable since January 2001. The number of participating HMOs decreased from 18 to 13 during this period due to the withdrawal of three from the managed care program, and the merger of two others with a third HMO.

This objective was addressed by analyzing enrollment data for family Medicaid and BadgerCare,[69] program records on the number of HMOs participating in Wisconsin's managed care program before and after BadgerCare,[70] and discussion with DHCF managed care staff. The

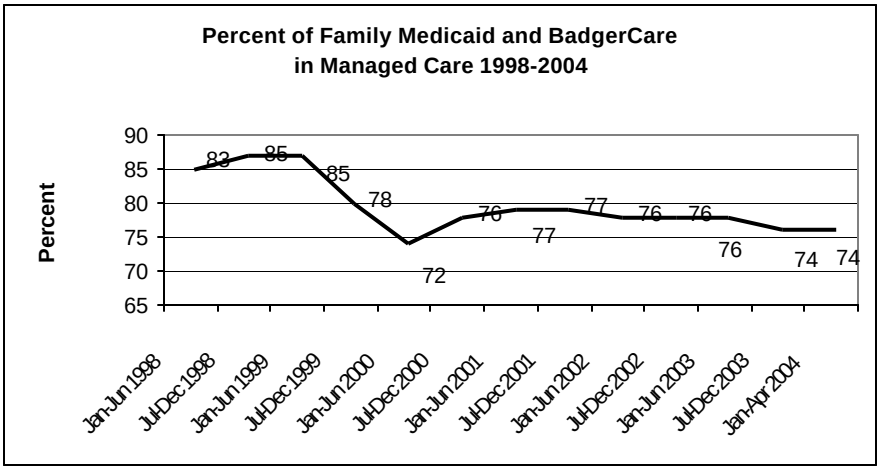
[69] Managed Care Enrollment Data DHFS Internet Tables.
[70] Annual Report of State Children's Health Insurance Plans Under Title XXI of the Social Security Act, Federal Fiscal Year 2000, Wisconsin Division of Health Care Financing.

number of persons enrolled in managed care, the percent of enrollees in HMOs, and the number of HMOs participating were analyzed to address this objective.

In June 1999, there were some 182,669 family Medicaid enrollees in 18 HMOs participating in Wisconsin's managed care program. By April 2004, the number of managed care participants had nearly doubled to 355,177, including 78,662 in BadgerCare. The influx of some 172,508 new enrollees in just under five years shows that the Wisconsin managed care program has had the capacity to absorb a large number of new enrollees into HMOs.

During this period of expansion, the overall percentage enrolled in managed care has declined. In June 1999, just prior to BadgerCare, 84.9 percent of family Medicaid[71] recipients (182,669 of a total 214,956) were enrolled in HMOs. By December 1999, six months after BadgerCare started, the percent had dropped to 77.0 percent, and by June 2000, 68.6 percent (203,379 of 264,083) of all family Medicaid and BadgerCare enrollees were in managed care. The managed care share increased to 76.3 percent in December 2000, and has remained relatively stable since then, although a slight decrease to 74 percent occurred during the ten month prior to May 2004. In April 2004, 355,177 of 478,941 family Medicaid and BadgerCare enrollees were in managed care, or 74.2 percent. The monthly data from 1998 through April 2004 are in Table 1 of Appendix IV, and are combined in six month intervals to show the overall trend in Figure 33 below.

Figure 33
Percent Family Medicaid and BadgerCare in Managed Care 1998-2004



Source: Managed Care Caseload and Medicaid Caseload Data, DHFS Internet 1998-1999

During BadgerCare's first year of operation, Medicaid HMOs were encouraged, but not required to accept BadgerCare patients. A requirement that all HMOs serving Medicaid recipients also serve BadgerCare recipients was made during BadgerCare's second year of operation. At the time, 18 HMOs served the Medicaid population in Wisconsin. Two HMOs decided not to participate during 2000, while a third left after January 1, 2001. Compcare Health Plan did not contract for the Medicaid managed care program after March 31, 2000, Family

[71] Enrollment totals for family Medicaid exclude Healthy Start Presumptive Eligibility and the Family Planning Waiver because participants in these limited benefit Medicaid programs are served on a fee-for-service basis only.

Health Plan of Milwaukee decided not to participate as of July 1, 2000, and Physicians Plus did not renew its contract when it expired January 1, 2001.

When Compcare left the managed care program, it enrolled 28,941 family Medicaid recipients and 5,785 BadgerCare enrollees, or 12.7 percent of the statewide Medicaid total, and 10 percent of BadgerCare enrollees. The Family Health Plan of Milwaukee had 1,762 family Medicaid enrollees when it left the program and zero BadgerCare recipients, or about .8 of one percent of the statewide family Medicaid total. The majority of Compcare enrollees (an estimated 53 percent) and nearly all of the Family Health Plan enrollees (an estimated 94 percent) were in Milwaukee County. Physicians Plus had 1553 family Medicaid enrollees (.6 of one percent of the state total) and 371 BadgerCare enrollees (.5 of one percent of the state total) in December 2000.

Based on the enrollment numbers in Figure 33 and Appendix IV, it appears that a decline in the percentage of managed care enrollees began immediately after BadgerCare enrollment started in July 1999, and from the 85 percent range to the 77-78 percent range observed during the August 1999 through March 2000 period. The departure of Compare after March 31, 2000 involved a large number of participants and was probably responsible for the transient decline to the 64-65 percent range observed in April and May 2000. The impact of Family Health Plan of Milwaukee and Physicians Plus leaving the managed care program was probably negligible because of the small number of enrollees involved. The percent of managed care enrollment has been stable at about 76-74 percent from January 2001 through April 2004.

In July 1999, 18 HMOs were part of the Wisconsin managed care program. In addition to the three HMOs discussed above, two other HMOs (Coordinated Care Health Plan of Wisconsin and Humana) merged with Managed Health Services, resulting in the 13 HMOs that currently participate.

HMOs enrolled in the managed care program are permitted to set a cap on the number of Medicaid/BadgerCare recipients enrolled. For the current 2004 contracting period, HMOs were asked to consider raising their caps in response to an average 4.7 percent increase in reimbursement rate. Staff report that the only notable gap in HMO statewide capacity, in terms of fee-for-service enrollees asking to join an HMO, is in Dane County where about 51 percent of eligible family Medicaid/BadgerCare enrollees are in HMOs, and 49 percent are fee for service. (In April 2004, 11,405 of 22,281 were in managed care, and 10,876 fee for service.) Staff noted that some fee for service enrollees would prefer to be in HMOs due to lower co-payments. Dean Health Plan in Dane County has raised its current cap by about 2,000 in 2004, and this is expected to generate additional capacity where it has been most requested, thereby increasing the proportion of managed care enrollees.

As noted in the Demographic section of this report, BadgerCare enrollees are more likely to live in rural counties (25 percent) than are Healthy Start participants (21 percent), AFDC Medicaid (13 percent), and the average Wisconsin citizen (16 percent). A dispersal of enrollees away from urban areas after BadgerCare started was also found in the RTI final evaluation of BadgerCare. Managed care participation by family Medicaid and BadgerCare enrollees may be mandatory or voluntary depending on the number and proximity of HMOs within counties, and is strictly fee-for-service in six counties which have no HMOs as of January 1, 2004. Because rural counties

tend to have fewer HMOs and are more likely to be voluntary or fee-for-service, the authors of the RTI evaluation suggest this may have resulted in a greater proportion of BadgerCare in fee-for-service situations. This factor could underlie the lower overall proportion of family Medicaid and BadgerCare enrollees in managed care after BadgerCare start-up in July 1999.

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Appendix I
Demographic Data on Family Medical Assistance CY 2001 Eligibles and Wisconsin's General Population

Table 1: Age of Family Medical Assistance CY 2001 Eligibles and Wisconsin's General Population

Age Group	Family MA Eligibility Groups						Wisconsin Population[72]	
	BadgerCare		Healthy Start		AFDC-MA			
	#	%	#	%	#	%	#	%
0 to 5	3,307	2%	107,451	52%	72,129	29%[7]	413,982	8%
6 to 14	38,761	25%	66,087	32%	66,442	27%	710,132	13%
15 to 18	11,061	7%	14,766	7%	26,925	11%	322,860	6%
19 to 59	101,137	65%[73]	19,245	9%	79,441	32%	3,007,643	56%
60 and over	479	< 1%	5[74]	< 1%	373	< 1%	909,058	17%
Total	154,745	100%	207,554	100%	245,310	100%	5,363,675	100%

Table 2: Race/Ethnicity of Family Medical Assistance CY 2001 Eligibles and Wisconsin's General Population

Race/Ethnicity	Family MA Eligibility Groups						Wisconsin Population[75]	
	BadgerCare		Healthy Start		AFDC-MA			
	#	%	#	%	#	%	#	%
Caucasian	98,396	70%	114,048	61%	94,495	43%	4,681,630	87%
African American	22,893	16%	34,530	19%	86,110	39%	300,245	6%
Native American	2,621	2%	4,273	2%	5,736	3%	43,980	1%
Asian	4,910	4%	10,992	6%	6,792	3%	87,995	2%
Hawaiian/Pacific Islander	96	< 1%	171	< 1%	215	<1%	1,346	<1%
More than 1 Race	565	< 1%	1,863	1%	1,915	1%	51,921	1%
Hispanic	10,655	8%	20,745	11%	23,586	11%	192,921	3%
Subtotal	140,136	100%	186,622	100%	218,849	100%	5,360,038	100%
Unknown	14,609		20,932		26,461		3,637	
Total	154,745		207,554		245,310		5,363,675	

[72] Data is from the 2000 census, SF 2 Tables QT-P1 and QT-P2.
[73] Percentages are precisely reported in the Appendix, but rounded in the pie chart figures so that the sum of the wedges would equal 100% without reporting characteristics that had an incidence under 1%.
[74] It is assumed that these are coding errors, as persons age 60+ would not meet Healthy Start eligibility criteria.
[75] Data is from the Census 2000 Redistricting Data (Public Law 94-171) Summary File.

Table 3: Gender of Family Medical Assistance CY 2001 Eligibles
and Wisconsin's General Population

Gender	Family MA Eligibility Groups						Wisconsin Population[76]	
	BadgerCare		Healthy Start		AFDC-MA			
	#	%	#	%	#	%	#	%
Female	95,648	62%	113,352	55%	151,718	62%	2,649,041	49%
Male	59,097	38%	94,202	45%	93,592	38%	2,714,634	51%
Total	154,745	100%	207,554	100%	245,310	100%	5,363,675	100%

Table 4: Urban/Rural Distribution of Family Medical Assistance CY 2001 Eligibles
and Wisconsin's General Population

Type of County	Family MA Eligibility Groups						Wisconsin Population[77]	
	BadgerCare		Healthy Start		AFDC-MA			
	#	%	#	%	#	%	#	%
Rural[78]	39,405	25%	44,320	21%	32,238	13%	849,402	16%
Urban Non-Metropolitan[79]	23,430	15%	31,824	15%	23,634	9%	873,965	16%
Urban Metropolitan[80]	95,496	60%	138,129	64%	197,558	78%	3,640,308	68%
Total[81]	158,331	100%	214,273	100%	253,430	100%	5,363,675	100%

[76] Data is from the 2000 census, SF 2 Tables QT-P1 and QT-P2.
[77] Data is from the 2000 census, SF-2 Tables GCT-P1.
[78] Rural counties have a population under 2,500 persons. Thirty-nine Wisconsin counties are defined as being rural counties.
[79] Urban non-metropolitan counties have a population of 2,500 or more persons and are not associated with a Metropolitan Statistical Area. 13 Wisconsin counties are defined as being urban non-metropolitan counties.
[80] Urban metropolitan counties have a population of 2,500 or more persons and are associated with a Metropolitan Statistical Area which includes at least: (1) one city with 50,000 or more inhabitants, or (2) a census Bureau-defined urbanized area of at least 50,000 inhabitants; and a total metropolitan population of at least 100,000. Twenty Wisconsin counties are defined as being urban metropolitan counties.
[81] MA Population counts are higher in the county type table than in the other demographic tables due to people moving within the year and transferring their MA eligibility to a different county.

Appendix II
Demographic Data on Family Medical Assistance CY 2002 Eligibles and Wisconsin's General Population

Table 1: Age of Family Medical Assistance CY 2002 Eligibles and Wisconsin's General Population

Age Group	Family MA Eligibility Groups						Wisconsin Population[82]	
	BadgerCare		Healthy Start		AFDC-MA			
	#	%	#	%	#	%	#	%
0 to 5	4,092	2%	111,765	51%	87,832	29%	413,982	8%
6 to 14	45,258	26%	67,966	31%	78,586	26%	710,132	13%
15 to 18	13,539	8%	20,451	9%	29,902	10%	322,860	6%
19 to 59	112,726	64%	18,904	9%	105,518	35%	3,007,643	56%
60 and over	566	< 1%	6[83]	< 1%	431	< 1%	909,058	17%
Total	176,181	100%	219,092	100%	302,269	100%	5,363,675	100%

[82] Data is from the 2000 census, SF 2 Tables QT-P1 and QT-P2.
[83] It is assumed that these are coding errors, as persons age 60+ would not meet Healthy Start eligibility criteria.

Table 2: Race/Ethnicity of Family Medical Assistance CY 2002 Eligibles and Wisconsin's General Population

Race/Ethnicity	Family MA Eligibility Groups						Wisconsin Population[84]	
	BadgerCare		Healthy Start		AFDC-MA			
	#	%	#	%	#	%	#	%
Caucasian	114,869	71%	122,609	61%	134,460	49%	4,681,630	87%
African American	25,032	15%[85]	36,174	18%	94,115	34%	300,245	6%
Native American	2,938	2%	4,477	2%	6,856	2%	43,980	1%
Asian	5,585	3%	11,055	6%	8,615	3%	87,995	2%
Hawaiian/Pacific Islander	133	< 1%	216	< 1%	295	< 1%	1,346	<1%
More than 1 Race	735	< 1%	2,105	1%	2,699	1%	51,921	1%
Hispanic	12,782	8%	23,930	12%	29,009	11%	192,921	3%
Subtotal	162,074	100%	200,566	100%	276,049	100%	5,360,038	100%
Unknown	14,096		18,456		26,160		3,637	
Total[86]	176,170		219,022		302,209		5,363,675	

[84] Data is from the Census 2000 Redistricting Data (Public Law 94-171) Summary File.
[85] Percentages are precisely reported in the Appendix, but rounded in the pie chart figures so that the sum of the wedges on each pie chart would equal 100% without reporting characteristics that had an incidence under 1%.
[86] Total population counts regarding race/ethnicity among the family MA caseloads differ slightly from those presented in the 2002 gender and age group tables because the race/ethnicity analysis was run following the weekly update to the MEDS data base.

Table3: Gender of Family Medical Assistance CY 2002 Eligibles
and Wisconsin's General Population

Gender	Family MA Eligibility Groups						Wisconsin Population[87]	
	BadgerCare		Healthy Start		AFDC-MA			
	#	%	#	%	#	%	#	%
Female	106,104	60%	118,885	54%	185,964	62%	2,649,041	49%
Male	70,077	40%	100,207	46%	116,305	38%	2,714,634	51%
Total	176,181	100%	219,092	100%	302,269	100%	5,363,675	100%

Table 4: Urban/Rural Distribution of Family Medical Assistance CY 2002 Eligibles
and Wisconsin's General Population

Type of County	Family MA Eligibility Groups						Wisconsin Population[88]	
	BadgerCare		Healthy Start		AFDC-MA			
	#	%	#	%	#	%	#	%
Rural[89]	43,137	24%	45,302	20%	44,841	14%	849,402	16%
Urban Non-Metropolitan[90]	27,584	15%	34,087	15%	34,585	11%	873,965	16%
Urban Metropolitan[91]	109,365	61%	146,108	65%	234,799	75%	3,640,308	68%
Total[92]	180,086	100%	225,497	100%	314,225	100%	5,363,675	100%

[87] Data is from the 2000 census, SF 2 Tables QT-P1 and QT-P2.
[88] Data is from the 2000 census, SF-2 Tables GCT-P1.
[89] Rural counties have a population under 2,500 persons. 39 Wisconsin counties are defined as being rural counties.
[90] Urban non-metropolitan counties have a population of 2,500 or more persons and are not associated with a Metropolitan Statistical Area. Thirteen Wisconsin counties are defined as being urban non-metropolitan counties.
[91] Urban metropolitan counties have a population of 2,500 or more persons and are associated with a Metropolitan Statistical Area which includes at least: (1) one city with 50,000 or more inhabitants, or (2) a census Bureau-defined urbanized area of at least 50,000 inhabitants; and a total metropolitan population of at least 100,000. Twenty Wisconsin counties are defined as being urban metropolitan counties.
[92] MA Population counts are higher in the county type table than in the other demographic tables due to people moving within the year and transferring their MA eligibility to a different county.

Appendix III
Number and Proportion of BadgerCare and Family Medicaid Enrollees in Managed Care
1999-2004

Month and year	Number in managed care: family Medicaid* and BadgerCare	Total enrolled: family Medicaid* and BadgerCare	Proportion in Managed Care
April 2004	355177	478941	.74
March	352625	473894	.74
February	349817	471064	.74
January 2004	345325	467573	.74
December 2003	346675	463479	.75
November	346092	463201	.75
October	339062	462308	.73
September	337684	456590	.74
August	337823	453642	.74
July	334095	446487	.75
June	333936	443822	.75
May	329572	441238	.75
April	334026	439828	.76
March	329935	435274	.76
February	327905	430850	.76
January 2003	323278	427668	.76
December 2002	321046	421170	.76
November	318787	421158	.76
October	316139	416504	.76
September	314538	412095	.76
August	310975	408145	.76
July	310398	401242	.77
June	310145	399846	.78
May	306274	399152	.77
April	296369	390229	.76
March	291312	385476	.76
February	286917	376209	.76
January 2002	280316	371395	.75
December 2001	283246	366450	.77
November	277885	363568	.76
October	274936	357025	.77
September	271769	352182	.77
August	264901	346963	.76
July	260591	336002	.78

Month and year	Number in managed care: family Medicaid* and BadgerCare	Total enrolled: family Medicaid* and BadgerCare	Proportion in Managed Care
June	260091	333211	.78
May	258527	330134	.78
April	252209	325652	.77
March	243434	322623	.75
February	235359	315593	.75
January 2001	237180	313906	.76
December 2000	237609	311462	.76
November	233854	309251	.76
October	233734	319887	.75
September	233283	308080	.76
August	228658	303010	.75
July	227415	300393	.76
June	204607	297960	.69
May	188305	293777	.64
April	188834	289065	.65
March	220410	284208	.78
February	214692	275025	.78
January 2000	210786	269811	.78
December 1999	203379	264083	.77
November	197609	257282	.77
October	192891	251836	.77
September	186024	240046	.77
August	180410	231478	.78
July	180963	221742	.82
June	182669	214956	.85
May	184102	217247	.85
April	184134	217071	.85
March	183353	215762	.85
February	182785	215398	.85
January 1999	182532	215709	.85
December 1998	182034	214537	.85
November	182855	216449	.84
October	182163	217894	.84
September	184462	217614	.85
August	186559	218488	.85
July	187327	220210	.85
June	190133	218838	.87
May	188807	220567	.86
April	184394	218144	.85

Month and year	Number in managed care: family Medicaid* and BadgerCare	Total enrolled: family Medicaid* and BadgerCare	Proportion in Managed Care
March	182702	220512	.83
February	173201	220556	.79
January 1998	178197	220093	.81

* Enrollment totals for family Medicaid exclude Healthy Start Presumptive Eligibility and the Family Planning Waiver because participants in these limited benefit Medicaid programs are served on a fee-for-service basis only.

Sources: Managed Care Caseload and Medicaid Caseload Data, DHFS Internet, 1998-2004